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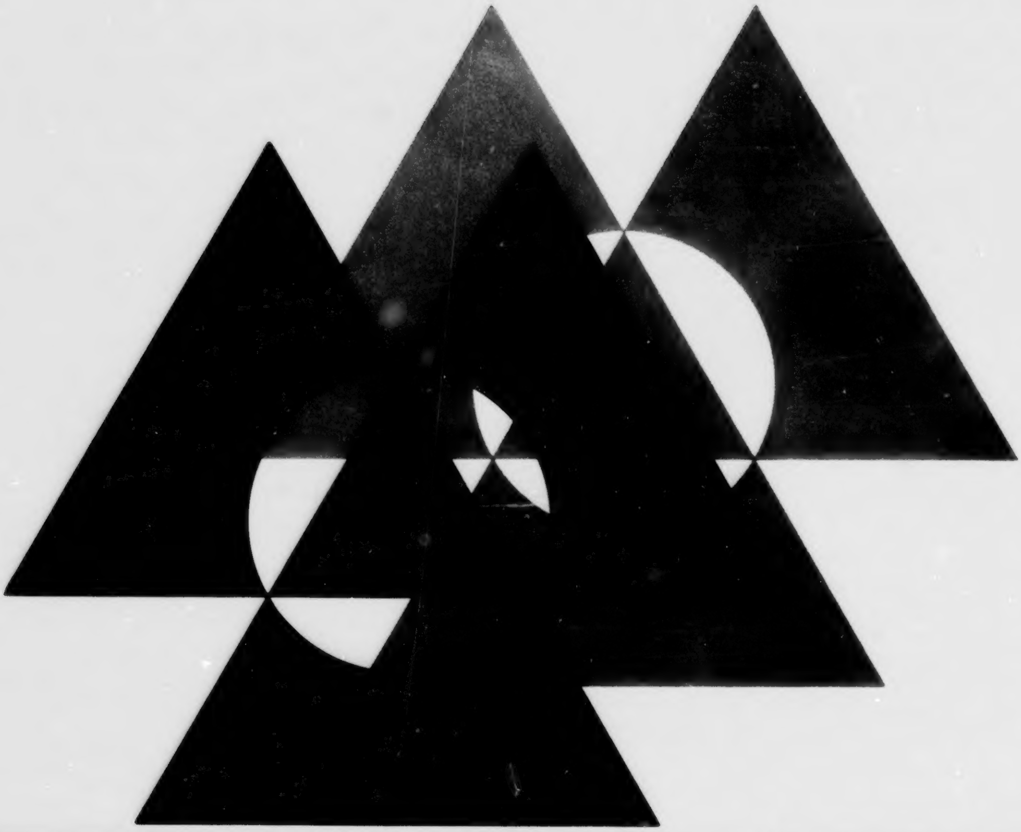

Alberta

Environment Council of Alberta

1985 PROCEEDINGS

Proceedings of the 15th Annual Joint Meeting of the Environment Council of Alberta and the Public Advisory Committees to the Environment Council of Alberta

December 5, 6, and 7, 1985
Edmonton, Alberta

Published by the Environment Council of Alberta

Theme: The Provincial Conservation Strategy

Distributed without charge as a public service.

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This document may be cited as:

Environment Council of Alberta. 1985. *1985 Proceedings: Proceedings of the 15th Annual Joint Meeting of the Environment Council of Alberta and the Public Advisory Committees to the Environment Council of Alberta.* Environment Council of Alberta. Edmonton.

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AGENDA

Fifteenth Annual Joint Meeting of the Public Advisory Committees
on The Environment and The Environment Council of Alberta
December 5, 6, and 7, 1985
Riviera Motor Hotel, Edmonton, Alberta

Theme: Provincial Conservation Strategy

Thursday, December 5, 1985

6:30 p.m.	Registration – "Mix and Meet" Banquet Room A and B (downstairs)
8:15 p.m.	Welcome from Planning Committee Chairman
8:30 p.m.	Film *Road To Bali* (international perspective to conservation strategies)
	Discussion
	Mr. Cleve Werschler, Nautilus Communications Ltd.
	Mr. Cliff Wallis, Alberta Wilderness Association

Friday, December 6, 1985

7:00 a.m.	Breakfast
9:00 a.m.	Official Welcome -- Banquet Room A and B (downstairs)
	PAC Chairman's Remarks – Dr. Sheri Dalton
	Welcome from the City of Edmonton -- Mr. John Schnablegger
	Welcome from the ECA -- Mr. Alistair Crerar
9:30 a.m.	The Honorable Fred Bradley, Minister of Environment
10:30 a.m.	Refreshment Break
11:00 a.m.	Keynote Speaker (National Perspective to Conservation Strategy)
	Dr. David Munro
12:00 noon	Lunch in the Main Dining Room
	Guest Speaker -- Mr. Alistair Crerar
1:00 p.m.	Resolutions – Part I -- Banquet Room A and B
2:30 p.m.	Refreshment Break
2:45 p.m.	Speakers (Provincial Perspective)
	Genetic Diversity -- Dr. David Kafton, Berkeley, California
	Integration of Resources - Mr. Ken Sumanik, Nelson, B.C.
	British Columbia Experience -- Dr. David Munro, Victoria, B.C.
5:30 p.m.	Adjournment
6:30 p.m.	Orientation Dinner for Workshop Facilitators -- Robert's Dining Room
8:00 p.m.	Films -- Banquet Room A and B
	Land, A Question of Values
	One Man's Garbage, Another Man's Gold

Saturday, December 7, 1985

8:00 a.m.	Breakfast Buffet -- Main Dining Room
	Chairmen's Reports
	ECA Research Division Report -- Mr. Dave Buchwald
	Report from the Nominating Committee -- Dr. Lub Wojtiw
	Election of Officers
9:45 a.m.	Introduction to Workshops -- Banquet Room A and B (downstairs)
	Mr. Mike Kelly
	Environmental Education Advisory Committee -- Boardroom (downstairs)
	Dr. John Godfrey and Mr. Dan Stoker
	Science Advisory Committee -- Room 290
	Ms. Louise Horstman
	Environment Protection Study Group -- Room 272
	Mrs. Dorothy Broadbent
	Renewable Resources Study Group -- Bubble Room (downstairs)
	Mrs. Maryhelen Posey
	Urban Environment Study Group -- Banquet Room A
	Mr. Bill Flook
	Energy Study Group -- Banquet Room B (downstairs)
	Mrs. Betty Paschen
	Non-Renewable Resources Study Group -- Conference Room (downstairs)
	Dr. Bill Buchta
	Pollution Study Group -- Room 247
	Mr. Brian Alleyne
10:00 a.m.	Refreshment Break (in workshop areas)
10:15 a.m.	Workshops (EEAC, SAC, Study Groups)
12:30 p.m.	Lunch in the Main Dining Room
1:30 p.m.	Workshop Plenary Session and Wrap-Up -- Banquet Room A and B
	(Facilitators report during this session)
	Acceptance of Prospectus Document
3:30 p.m.	Refreshment Break
3:45 p.m.	Resolutions -- Part II
	(Provincial Conservation Strategy Resolution)
5:00 p.m.	Adjournment
6:30 p.m.	Happy Half Hour
7:00 p.m.	Banquet -- Banquet Room A and B (downstairs)
	Introduction of Guest Speaker -- Mr. Bob Richardson
	Guest Speaker -- Mr. Carl R. Surrendi, Carsall Enterprises Ltd., Edmonton
	In Appreciation -- Mr. Bob Richardson

Sunday, December 8, 1985

7:00 a.m.	Breakfast
9:00 a.m.	Departure

EVENING SESSION – 8:00 P.M. **Thursday, December 5, 1985**

CHAIRMAN RICHARDSON: Ladies and gentlemen, can we call the meeting to order. Just looking around the room -- I haven't figured out what this is for, unless the next chairman of PAC is going to be a midget -- at any rate, I would like to introduce myself for our new members and for those who don't really know me. I am Bob Richardson, vice-chairman of PAC. One of the duties of the vice-chairman of PAC is to chair the organizing committee for the annual joint meeting, so as chairman of that organization, it is my pleasure to welcome you all to the 1985 Annual Joint Meeting of PAC, SAC, EEAC and the ECA.

For the organizing committee, I had an awful lot of help, consisting of Elmer Kure, Joan Snyder, Bill Flook, and George Stewart from PAC, plus Archie Landals, Ken Nelson, Randy Pretty, Mike Kelly, and Kim Sanderson from the ECA staff. You can see I didn't have much to do; they did all the work. I just tried to keep my name off the program as much as possible.

I would like to express my personal thanks to all members of the committee for the invaluable assistance in organizing the meeting.

To demonstrate that we are a very democratic organization still, the date and theme of this year's meeting followed the wishes of the majority of the members as expressed in an evaluation form from the 1984 meeting. The theme, as you all know, is "Provincial Conservation Strategy for Alberta." As you all know, or most of us know, at any rate, the steering committee is spearheaded by Joan Snyder and Elmer Kure. Plus two research staff, Mike Kelly and Kim Sanderson, have been working very hard on Phase One of this project, that is, the production of the prospectus document. They have been working on this for about eight or nine months now, and you have the results handed out to you today in the blue-covered book. That is the latest; please throw all others away. We hope that is the final one; however, we are still open to changes, if some of you have not already communicated them.

I think our steering committee and the staff of ECA are to be commended for the progress they have made. They have done an awful lot of work in these last months, and I would like to congratulate them for the excellence of this document. Alberta is now one of the leaders, if not the leader, in producing a conservation strategy in Canada. The speed of progress that has been made in Alberta came as a result of Elmer Kure and Archie Landals and Dave Buchwald twisting Alistair Crerar's arm a little bit to assign a couple of members of the ECA staff to this project. I would like to personally thank you, Alistair, and the ECA staff members for their tremendous support of this project. We really appreciate it, and I think the results are going to be very worthwhile when it is finished.

Mike and Kim have done the bulk of the writing, at any rate, for these documents; the steering committee have had some input and requested some changes which have been made, but they did the bulk of it, and I would like to thank them for the dedication they demonstrated, and the excellence of their work.

The program for tonight will address the World Conservation Strategy, which, as you all know, has been accepted by the Canadian government, and by most of the provinces verbally. It will form the background for the conference. Tomorrow, after all the formalities such as the welcoming speeches and so on are complete, and the Minister of the Environment has given his state-of-the-environment address, as he does every year, we will then switch over onto the national and provincial theme with Dr. David Munro speaking to us in the morning, and a seminar in the afternoon covering conservation strategy in general.

We do have one change in the speakers who are in your programs for Friday afternoon: Mr. Lloyd Rushton, the co-ordinator for the BC conservation strategy is not available to be with us, and Dr. David Munro will pinch-hit for him, as he has been working very closely with him. On Saturday we will have workshops to determine the course of action that we will follow next, as the next step in the production.

As far as that goes, while I'm speaking to you, I have two other changes in the program. You will find on the Saturday morning, on page 4 in your program -- only two study groups have to listen to this, that is, the Non-Renewable and the Pollution Study Group -- the Non-Renewable Resources Study Group has been moved to the conference room on this level, and the Pollution Study Group has been moved to Room 247. If you will all make a note of that on your sheets, so you do not get to the wrong place.

The joint meeting committee hope that all of you are going to enjoy this meeting, find it interesting, informative, and worthwhile. We hope you will become more familiar with the conservation strategy, and that you are going to assist the committee in selling this concept to the organizations that you represent, to industry, to other environmental groups, to government, and, of course, to the people of Alberta. We are going to need your help, so please do your best to support us, because once this document is finished, it is going to need an awful lot of selling to get all the groups to accept it.

The program for tonight was organized by Archie, and I will now turn the meeting over to him to chair the first session of the 1985 Annual Joint Meeting. Archie?

CHAIRMAN LANDALS: First of all, welcome to everybody, and I don't know that I can really take much credit for organizing the program for tonight, because really organization wasn't necessary; it was simply a matter of putting in a phone call or two and inviting people to show the film that you are going to see and introduce it. I have one other minor change in your program. It said an Ed Andrusiak was going to be here; Cleve Wershler is here instead of Ed tonight. Ed is involved in a contract in Calgary that he couldn't get out of. When you are making your living that way, sometimes it is necessary to put business ahead of other commitments. Ed sends his apologies in that regard.

I'm not going to talk very much about the movie; I am going to let our guests do that. I simply want to introduce the two of them. They were both directly involved in the preparation of this film, which was prepared here in Alberta for the World Parks Conference in Indonesia, and I will let them talk about the production of it, what was involved. I will leave my comments at that. I would like to introduce our two guests tonight, Cliff Wallis, and beside him Cleve Wershler; do you want to stand up, please? They will lead our discussion tonight. If you want to come up here with a few introductory comments, I will let you start, and I want to thank everybody for being here tonight.

MR. WERSHLER: Good evening. The film you are about to see tonight was produced by Cliff Wallis and myself together with Ed Andrusiak and another producer, and Pat McCloskey was a fourth person. It opened the latest World Park Conference in Bali, Indonesia in October of 1982. It is the third one they had, so you can say the Third World Parks Conference -- that has nebulous connotations.

It does not entirely represent the World Conservation Strategy, but we used, borrowed heavily from that document for our background and information, and so a number of key points from the World Conservation Strategy are stressed throughout the show. The show sort of sets the stage for speakers who spoke at the conference over a week. It was shown again at the end, so it was favorably received by the international community, and I think represented the world issues very well.

In this show we attempt to reveal the tremendous diversity of the natural world, and the various threats against this. We also show how we rely on the natural world; indeed, our most valuable resources depend on good conservation practices. It is funny, over the last few years since the congress, Cliff and I have been throwing the logo from the World Conservation Strategy into all sorts of shows that we have been doing, and a lot of people do not recognize the name World Conservation Strategy, so it is gratifying to see something being done in Alberta here with it. We wish you luck.

Other than that, Cliff is going to lead a more extensive discussion, more relevant to the theme, following the showing. I will just close the doors and we will turn off the lights and have the film.

(FILM *Road To Bali* being shown)

MR. WALLIS: I guess you probably all have some sort of draft document in conservation strategy to look at, and a more eminent person in the international field than I, Dr. David Munro, is here to guide you along and to follow the discussions along. What I would like to hit on here and try to show, to take off from where the show ends, is that the show was really designed for parks and protected area groups, and some people might perhaps get the impression that we're trying to compromise the ecosystem of strictly protected areas. That is not by and large the intent of most people involved with things, but to expand the role and the definition of protected areas to include much more of the land base and to have conservation a prime objective of that. Right now, I think we see the ever-shrinking land base from the many strictly protected areas in a sea of poorly-conceived, poorly-conserved land base where we are losing everything from soil, air, water resources, you name it. I am glad to see the ECA taking up, through a few individuals, to start at a conservation strategy for Alberta. It certainly will be in good company; there is a network of people involved out there, very concerned with the problems of the world, and the problems of conservation. If we don't do it, it's not that far down the road, it is within our lifetimes that we will see not only our health and livelihood threatened, but our very existence.

As a compliment to what is going on here, in Banff in September there was a Heritage Conference that celebrated a hundred years of National Parks in Canada, and I was co-ordinating the activities of the Alberta caucus. I will read you one of their recommendations, which is now being circulated. We have been promoting the need for regional conservation strategies since 1982, since we became aware of the implications and the support that this program has, that it was not just conservation groups, but we have reports from agencies like the World Bank and from industry groups. Conservation is not just for an elite group, it is for everybody. One of the Heritage Conference recommendations was that there is a need for developing provincial and regional conservation strategies, as part of the World Conservation Strategy and aligned with the principles of the Bali Declaration which was agreed to as a result of the 1982 conference, and they are here for people to see. Conservation must be recognized as essential to human survival, and government should therefore develop a strong commitment to a conservation strategy – implicit in this is the retention of land, which you have just seen, and this was in September before this all happened -- and in some places, the restructuring of existing rules to establish parliamentary at a federal level, legislative at a provincial level, and municipal standing committees for environmental conservation and heritage. Conservation and development must be viewed as inseparable partners.

I think that is the point: it is not just a provincial conservation strategy; there should be local strategies as well, everybody should be working on these things. And beyond the conservation strategy -- it is not really addressed as part of the conservation strategy, but certainly there are other strategies that have to go along with it for it to work. One of those, which we don't think about much here, is a population strategy. Another one is a strategy on poverty, and those kinds of things sort of are even more down the line perhaps in our thinking, but we had better start thinking about them now. We are thinking about a provincial conservation strategy, and we think we are ahead of other places, but it will also help this conservation strategy once it is developed, once we get some ideas on paper, to enact it, and make sure it succeeds, because it is just a bunch of words and it is just the start of the project. We have to carry that forward.

So, I would be willing to entertain any questions about the program itself, open up for a general discussion.

MS. POSEY: I would certainly be grateful for any hints you have, once you introduce people to conservation strategy and the sustainable development that you were talking about, that you were not talking about freeing the earth in its present state, God forbid, only in part, they suddenly take it into their heads that that means there is no area for which preservation rather than conservation is appropriate. I was glad to hear you point this distinction out. How do you do it, what is the easiest way of hooking back in?

MR. WALLIS: I don't know if there is an easy way, but it's a policy thing. Some societies have evolved where they have a respect for the environment, where they have taboo areas, and they are mostly small. I think in North America we have the luxury and benefit of true wilderness still, and that is viewed as a prime resource around the world. But the point is that I think everybody has to develop a strategy that is appropriate to their cultures, because some things boil down, I guess, as a conservation strategy is more not conservation but philosophy. It's like management: we work on the Milk River, and I don't want to see a lot more fences but it has nothing to do with conservation, it is more with aesthetics and things like that. When you start to get into that gray area by dealing with it, I think that there are certain culture things that are going to have to be decided that are in that gray area. It is not all black and white; otherwise, we would say we will preserve 95 percent as a living museum, and people will be relegated to the sidelines. I mean, that might be a cultural apogee of some study, I don't know, that may be somewhere in some intelligent galaxy, but I think largely what we are dealing with here is a spectrum, recognizing the need for the whole spectrum, what the weightings are, and that is not easy.

MS. POSEY: I don't think you're quite hitting it, because we may have a culture that doesn't like grizzly bears well enough to preserve them, and you can't say well, we can't keep grizzly bears, so we had better have a cultural habit that lets us keep them. I am not looking for how do you decide what balance, I'm looking for how do you tell, what handle do you use to say preservation of some area, of some things is part of it. What hook do you use? I think it is in there, but it doesn't hook them.

MR. WALLIS: It doesn't hook them, but I am seeing there are enough people out there with that view. That is not the problem; the problem is hooking the politicians.

MS. POSEY: I was thinking of Susanne Blais-Grenier.

MR. WALLIS: The problem is, there will always be people like that who like to shoot everybody so that they could amass their personal wealth of the world and attain absolute power. But, you know, I don't think we are getting into that; I think implicit in the conservation strategy is recognition of the value of not only grizzly bears, but also mosquitoes. Everything is in there, although I don't think you will get much support for mosquitoes.

MR. WERSHLER: I was talking to Cliff a few moments ago about the World Conservation Strategy, and if you read it, it makes a lot of sense, but it is like religion or like the Ten Commandments; it's an ideal. And ironically there are quite a few religions which oppose, directly oppose, pieces of the World Conservation Strategy. Like Cliff said, it is a philosophy more than anything else, and there are states that think they are exempt from the World Conservation Strategy because they think they are doing everything right. They have, you know, kind of taken a step back from it in recent years, when in fact they are violating many aspects of the World Conservation Strategy. So it is not an end-all thing, it is guidelines; there are a lot of steps underneath that have to follow. We should still, once we get it in Alberta -- I don't know how much it is going to help, but it is a starting point to base everything else on.

MR. WALLIS: Not much of that sort of thing happens overnight; these are long-term things to focus our attention on where we should be heading, and how we should be doing things. Without that there is no sounding board, there is no way for society to react to things. I guess that, simply put, it is for the common good, for the common man. We think it is not just an elite thing, it is an active document, and some governments have taken it up very seriously, and at subregional levels, not just at the national level. As the ball gets rolling -- it's like Fish and Wildlife. Many years ago it was hard to get them to talk about it, now it is becoming more everyday commonplace. It is just people interested in and making sure those ideas come forward. It doesn't happen overnight, but we will start to see results, and that is the important part.

DR. HACKLER: I was wondering, how do you deal with the border between etiology -- you mentioned everything is important, not only grizzly bears but also mosquitoes. Some people would argue that if you extend that logic to smallpox and AIDS and what have you, where is this border between those parts of the natural world that we are trying to change, and other parts that we are trying to preserve? I think you start getting into some philosophical questions.

MR. WERSHLER: It doesn't get that picky; it stresses ecosystems more than anything --

DR. HACKLER: And common sense.

MR. WERSHLER: And common sense. So somewhere you need mosquitoes, but you can't say that you can't spray mosquitoes in areas where they need mosquito spraying because they are not compatible with people's activities. As long as we don't try to eradicate them from the face of the earth, not if it is going to have dire effects on other things which you don't know anything about till it happens.

DR. HACKLER: I'm saying there are other ecosystems for other micro-organisms where we start to get into areas where there are statements of faith. Now I'm not against that, I'm just saying we need to deal with that.

MR. WALLIS: That may be reality when we get to the strategy level. We are going to have trouble dealing with certain, even the bird level, in terms of our knowledge and data base. I don't think that is going to be a problem 100 years from now or 200 years from now in terms of what we do or don't do. I think in practical terms, we are not going to run into problems for a short while. It may be a philosophical point, but I don't think it is a practical point.

DR. HACKLER: I'm not trying to make waves here; it is the sort of discussion you have to come to grips with. The question of Ducks Unlimited: it was a campaign to preserve wetlands for ducks, but the main point is we were going to shoot them later on. Why we are doing some of these things is because they are mainly for the pleasure of the human species, and I am not arguing against that, but it strikes me we are then saying human species are important, and other species are clearly subservient. It seems to me there are some philosophical theories and some scientific theories that don't necessarily fit together here, and we are trying to, I think, oversimplify them. At times we are sure that the conservation strategy is a simple one; I do not think it is that simple.

MS. POSEY: I told something a moment ago as a joke; now I'll answer that. Smallpox, we have eradicated smallpox in the world as a human disease, but we have made a very deliberate and concerted effort to preserve it on the face of the earth, because it holds genetic information that we do not yet understand and appreciate. Granted, the notion that all genetic material is of value is a matter of faith, but we have gone a long way already. The conservation strategy is not going to do anything as drastic as the preservation of smallpox; it doesn't propose anything as drastic as the preservation of smallpox. We have done that as an article of faith which we have adhered to for over a hundred years. Maybe we'll take it out; in the meantime, we have still got smallpox, in case it has anything to teach us.

MR. PASCHEN: Gerry Paschen, Non-Renewable Resources. I appreciated the slide presentation, it was very slick, but I think there is a message in all the things we do. You people just mentioned mosquitoes. In this province at this time, there is a need for someone who produces this chemical. If there is a need to spray mosquitoes, there is a way for someone to make money manufacturing the chemical to spray mosquitoes. So we have to either live with the mosquitoes or forbid them to be made so we don't have these kinds of things happening as they are happening in Ontario. We know each other here, and we know there are some converted and some who are not converted, and it may be identified in such a form as they belong to a large corporation. The thrust of a conservation strategy has to go to the roots of the large corporation where decisions are made to create that chemical that kills mosquitoes. The little man, the converted ones like myself, we cannot go to the top guy of a large company and tell them to stop making this chemical; there is money in it.

MR. WALLIS: I think that is where you are wrong; people like you guys do make a difference. Conservationists are working on national large corporations and international agencies that are totally oblivious, and loans and that to environmentally depraved countries are not made as easily as those that exhibit good conservation practices.

MR. NELSON: Did you say environmentally depraved countries? That is a very interesting phrase. It is probably accurate, but it is interesting.

MS. POSEY: But he wouldn't dare identify them.

MR. SURRENDI: I would say that hopefully there are signs, at least in the society we have around us today, at least in this country, that indicate that a great number of the major environmental problems around us today will be solved by some of these major corporations, because they are worth solving financially. And, furthermore, I would also say that I absolutely abhor, and I don't understand the logic of, any industry -- government or otherwise supported -- that can operate anyplace where the cost-benefit analysis does not include the marketability of the product, ergo and i.e., agriculture in Alberta. I have never in my entire life run across a situation where those who contribute to cost-benefit analysis to open and expand agriculture anyplace in the world fundamentally ignore, and in fact put to the side, the fact that you can't sell your product for more than it costs you to grow it. How the hell did we ever manage to get into a situation like that where we can't turn to our government and say "If you can't cut it, you can't stay." Why can't a farmer go bankrupt? Ask any rancher in this room, or anyplace else in this country, who has made it through three or four generations who has to sit back and watch while the government goes rampant and subsidizes his competition for him when he can hardly make it on his own right now. We have got our own problems in this goddamn country, you know. There's no sense talking about Israel or Egypt or Ethiopia; we are watching our country turn into a desert right here.

MR. WALLIS: That is the whole point, that they recognize certain things, that we have environmental problems, that we have population problems right here at home, and that we don't recognize the limits to our resources, the limits to which we are using them, and indeed the way we consume them in inordinate amounts to meet the lifestyle that we have grown accustomed to. The conservation strategy is trying to deal with some of those issues. The economics, I think, is probably as well fundamental to it, and it is long-range. I think that is the important thing. You can justify all sorts of things on a five-year basis, but when it is your return on your investment, you are not seeing that capital for a hundred years -- that is really what the conservation strategy is all about. It is not short-term typical cost-benefits analysis; we are talking about cost-benefit analysis over much longer than that.

MR. WERSHLER: One way that we looked at this show when we began to produce it, and in this case, was that natural history is always separate from cultural history. You know; if somebody wants to use a famous art gallery for a big bash, a big dance, they probably won't get permission unless they happen to be a billionaire or something like that, but if Ralph Klein wants to hold a tea party down at Inglewood Bird Sanctuary, nobody will stop him. The fact is that natural history is as much a part of us as cultural history, and I don't think they should be separated. The World Conservation Strategy separates that point as well. Every major example of natural history we have in Alberta should be protected, and it is disappearing as fast as you can say any politician's name. What little we have remaining in the grasslands and parklands could be sold in the next few months to somebody who wants to cultivate it. That is the only reason they want to sell that land off, is that some people can cultivate it so it is deeded property. Issues like this aren't available to the general public, because when they are written or spoken about in the news media, the real issue isn't there, it's the dramatic things, the little peeks that somebody wants to pull out which are thrown at the public, and unless you travel around the province like Cliff and I have had the good fortune to do over the last ten years or more, you don't realize how fast things are disappearing, and what rotten conditions, you know, some of the existing land is in, and how poorly managed some of the agricultural land is, et cetera, et cetera, et cetera. I think the World Conservation Strategy can set up kind of a matrix so you can point out some of these things and get some international support. It is just a logical way, I guess, to progress, because we have tried going to traditional meetings in Alberta and other provinces, and it hasn't worked.

DR. KOSTUCH: Martha Kostuch. You mentioned, Gerry mentioned that you are speaking mostly to the converted, and you mentioned earlier that most of the public agrees that preservation and conservation are important things, but that the politicians don't. So do you have any suggestions how we can convert our politicians?

MR. WALLIS: You are doing it by holding this and focusing on conservation. You are starting on it. As Cleve mentioned in our slide show and in all the briefs, the Alberta Wilderness Association shows, and a number of others, that is what we have been mentioning in the last three years. People have become interested in that way, and other people have mentioned it, and other organizations have mentioned it, and we're talking about land divisions; they are aware of it now, their regional land managers. We still need to keep beating them over the head with a baseball bat on the issues of the day. But you have to start with slow progress so that it becomes just like in pollution control; I mean, things would be a hell of a lot worse today if we hadn't gone through that period in the '60s and that where we went through a lot of public information, communication. Now everybody is just accepting that certain things are done. We have reached another plateau in that area. We do it really in these little stages, and now we are seeing culmination. They can't just ignore you, politicians can't ignore you; this is not something that fights against what they should be doing. In other words, they can't say "I hate conservation; conservation is not good for Alberta." Nobody can argue that conservation is bad for you; conservation is the best thing that we could ever do. So it is just a matter of keeping on pushing.

DR. KOSTUCH: Except that we have people like Les Cooke coming up and saying that the economy is more important than the environment, and putting the economy first.

MR. WALLIS: That is where we have to jump on them, and if Les has said that overtly, then it is up to us and the media to pick up on that sort of thing. The public opinion doesn't mandate that we should ever allow people who are controlling our lives to say that.

MR. SURRENDI: But the idea is to make this strategy, or to simplify it, or to convert it to a language that politicians understand, that being jobs and economy. I have no illusions about the fact that if we can divert the economy into a situation where we can create jobs by cleaning up a lot of the mess, and by exporting that type of technology, we could have as many jobs as we have now, or perhaps even more, and have a far cleaner and more upstanding environmental approach to things. I don't think we have to shut everything off; the traditional way, as you said, hasn't worked, and we better try something else.

MR. WALLIS: We did approach them. In 1983 we presented to caucus committees the idea of things like wildlands and the Alberta economy, pushing the economics of environmental protection. We have been pushing the economics at a symposium held here recently. We have been pushing that quite a bit lately, but the politicians still don't believe it; there is still that doubt. It is the duty of all of us in programs like developing a provincial conservation strategy; it is part of convincing them. They don't get convinced overnight. We were down in Tucson for an arid lands conference in October, and the person was reading these articles and saying things like if we don't do something now, salinization is going to destroy this land, and he went on and on. He said this has been written on in the early 1800s in India, and indeed they did destroy the land. The problem is to communicate and convince people. People have known about these problems for hundreds of years; there are still places in the Middle East from salinization that they still can't grow crops on. So I guess that is the point, that we have to now, more than we did in the 1800s, have public mobilized. We have ways of inputting into systems, even if it doesn't seem like it, and so it is up to us to communicate those concerns, and educate, whether it is in the school system or promotional packages at conservation authorities. There should be packages going into the school system; there should be packages made available to every industrial group, agricultural group, the whole works. At the ECA, you have that broad base to disseminate that information, because it is not just for some elite group or one narrow group, it is for all groups to carry forward.

MR. FAUSER: Horst Fauser. I am not quite in agreement with you that you said the public is supporting this. If the public would support it actively, then you would also convince their local MLAs that to get elected by the same public they would react to the opinions of a strong-voiced public, and unless you are able to convince the general public who might say, yes, I am for conservation, unless you convince the public to express their opinions openly and say, listen, that is where we want you to go, and to do that, you have to implement this conservation strategy.

MR. WALLIS: In Alberta, indeed, anywhere, the public only gets interested where there is an immediate and real major threat to something. Conservation, these pro-active programs – it doesn't matter, even within conservation organizations trying to get something that is positive and moving forward, you don't get many people interested. People do not work on those kinds of things, people work on anything where people are getting their toes stepped on, and that's how you generate interest. We have a lot of people getting interested in moving forward with a general conservation program; it is the kind of thing that the politicians, though, are more interested in in the long-term, and that is what I am getting at by communicating. You people and other groups are representatives of the public, and you do carry some weight. You don't win in most cases -- maybe in no cases, I don't know -- on the immediate issues of the day; that's not where perhaps the strength of this group is. But you do win in the long term in changing opinions and reflecting the public attitude so things are better for the future.

DR. MUC: Michael Muc. I think our difficulties we are seeing in the conservation strategy are in approaching it on a philosophical basis. If we can approach it on an economical basis, that is a reality they can understand and react to. As soon as you start hitting with hard figures, I think then the reality begins to sink in. If you talk about ideologies, then, well, you are wasting your time because the converted, of course, deal at that level, but the unconverted, the general public, can't, and I think possibly this strategy has to change, recognizing that the politicians, or lawyers, or political scientists, you know, they are not environmentally concerned.

MR. WALLIS: I think you have to bring in the facts and figures in order to convince people. Even the Global 2000 report prepared under the Carter administration obviously hasn't affected the Reagan administration very much, and all the facts and figures were in there. People just don't want to believe how bad things are, and how bad things could get; they don't pay attention to it, and that's what I mean: it is a longer-term thing. It is only after you get massive things like Bhopal, or the Saheli crisis and things like that, that people start to wonder about things. But, like we said, that's not where your major concerns are. We have got concerns generally; we shouldn't have to wait for a crisis to arise. It is reality, and I don't think we are ever going to get away from it. But even the facts and figures don't convince in the short term; it is only in the long term that the facts and figures convince people. It seems sort of futile if you just look at the projection over a five-year period. I think you have to keep at it, and that is the only reason we do this stuff, for money as well as for love of it. It is a very important thing. We wouldn't be here tonight if we didn't feel that way.

MR. FABRIS: Gary Fabris, Environmental Protection Group. I think the only way we can get at that is to obtain a level of credibility so that you can tap it when you need it. I think that is the problem with a lot of environmental groups, that you have got to establish that credibility, and never let anything happen to lose it. Otherwise you lose what you have captured and that is the only thing you can mobilize that is worthwhile in the long run.

MR. WALLIS: I will put something back to this group, I guess, that really it is not environmental organizations that should be carrying the ball, it should be farm organizations, oil companies -- it should be all those people. And you people do represent -- and maybe they are not all here tonight, but they are certainly here through the year -- you people do have that kind of representation among your members, you do have the influence, you do have intelligent people. We are not people who, once presented with reality and the facts, are going to ignore them. As I said, nobody can say with a straight face that in the long term conservation is bad; that's a non-issue.

MR. WERSHLER: Somehow conservation has to be incorporated into people's lives in one way or another. Being involved in several conservation groups in Alberta over the last 20 years, I see how disorganized we are. You can't get two groups to agree on one thing, and you can't get all people to join these groups, you can't get a common voice, and yet an issue like renaming Kananaskis Park has everybody fuming. Ninety-nine percent of Calgary doesn't want that name change and would probably put their lives on the line right across the TransCanada Highway for it.

MR. WALLIS: We haven't convinced the media either of the importance, but it is happening. I get hope from people like McMillan, the Federal Minister of Environment, who wants to make it acknowledged as a senior portfolio. I don't think it is for the power; I think that people are starting to realize that these things are major economic, major social issues, and they are not just fringe things that we should be concerning ourselves with part-time. Unfortunately, it is only after we get a chemical spill that the farmer starts to realize and wants to know why. We have to look at these things in a holistic framework, and I guess what is even more to the point, conservation strategy is not in isolation from everything else; it is trying to bring everything together in a logical framework, a way of focusing our attentions on that.

MR. WERSHLER: It may serve to unite some of the people in Alberta.

MR. WALLIS: I haven't heard anything back -- do you feel that you get that representation through the ECA? Are you filtering back through all those organizations that are supposed to be brought together?

DR. HACKLER: Jim Hackler, Science Advisory Committee. I want to raise the point, does the public really support this as much as you believe? For example, take the issue of pollution. You talk to this steelworker in Eastern Central United States who has been unemployed, who is willing to put up with pollution in order to have a steel mill operating. How about the German worker in the Ruhr Valley? I am not convinced that people are willing to give up quite a bit in this area in order to work. I am wondering about that in certain areas. There are many areas of, say, the United States, depressed heartlands of industry, where they would happily have a certain amount of pollution in order to have a job. There are significant polls --

MR. WALLIS: But those are selected polls giving selected questions on a narrow range of issues. They don't present the whole thing, like, what do you want your kids to have, do you want your kids to survive 20 years from now. In terms of conservation strategy, they are not listed properly. You can do any poll, if you make it a logical poll, and --

DR. HACKLER: Part of my work is in polls and questionnaires, and I know what you are saying there. But what I am saying is everybody is all for their children having nice air to breathe in the future, but they are also after jobs now. I'm suggesting in the Ruhr Valley, people have tolerated pollution galore for years in order to have economic returns. I'm not saying that they are right; I'm saying that I can understand the immediate concerns of jobs, just like here in Alberta. We sacrifice about ten lives a year to the oil industry, and that is seen as a reasonable trade-off, we accept that as a trade-off. We will kill probably ten times as many people by murder, and we accept that as a sort of trade-off. I am a criminologist, by the way. We have got a more complicated strategy: if you can convince American governments, Canadian governments that we all need to have anti-pollution devices on our factories, it equalizes out the competition, and with that view themselves as a world objective so that, okay, we are not disadvantaged if we go for the pollution devices and the Japanese or the Germans don't.

MR. WALLIS: That is what the World Conservation Strategy is about; it is implicit in terms of what they are doing.

DR. HACKLER: I'm saying that is a more complicated task, and that is where the public is first going to be competing with Germany and Japan; secondly, they will be in the world conservation, and I don't know how you move to that second level.

MR. WERSHLER: The World Conservation Strategy doesn't have all the answers, but it does point to the three major resources which keep people alive like soil, water, and air. If you don't have the proper air to breathe, and if you run out of arable land, and if you have also got polluted water, how are you going to live? It is also the greater good and the health costs, and that is what I am getting at: it is convincing, it is getting the facts and figures and presenting them and saying, okay, you know, so who is willing to pay the health costs of bad air? We would rather pay them outright to clean up their act, everybody has to share in the health costs, and we don't want our trees -- we don't want acid rainfall and things like that, of course. You don't have all those problems in Alberta, but that is the point: we want to start here and point out what the problems are right now and how do we avoid getting into the mistakes that other parts of the world are into, and how do we rectify some of the problems we already have.

MRS. GOODWIN: Mary Goodwin, Energy Study Group. My husband and I were just down in California at the end of October attending a California Flying Farmers Convention, and there were representatives there from all over the State of California, and we were talking about the problems that they are having with irrigation. They wanted to build a flushing ditch in the San Joaquin Valley, and flush all of this area out into the San Francisco Bay -- you know about this. Of course it was stopped. They started building it, it was half-built, and the public in San Francisco decided they didn't want this material to be flushing into the bay, so they got up in arms and the whole project was stopped. It wasn't built. So I don't really think the public -- those people can't seem to equate this problem in this major food-producing area that is going to affect it, so I don't think the public is aware, they are not aware enough. David Suzuki had the same thing on a couple of weeks ago.

MR. SURRENDI: My former statement still stands: in relation to what you are saying, I frankly feel that a government like we have here should take the initiative and create jobs by cleaning up the pollution. High-tech, high-industry jobs that create a lot of work and can be exported to solve other people's problems are highly competitive, but why aren't we doing it? We've got problems here; there is no question in my mind. I have seen what happens along the river and a few other places. We have every opportunity to create all kinds of high-tech jobs to clean these things up and export our technology elsewhere. We don't have to lose jobs because of pollution, we can create jobs. We have this narrow mentality which says we have to bear pollution to have jobs -- that's crap.

MR. WALLIS: Put another way, if, when we had been doing this we had a conservation strategy about the time of Confederation, that perhaps today we have the largest bison range in the world. It's one hell of a tourist attraction, probably generating more dollars in revenue than the whole industry that we have got on that land today. So I think that's the point: there is a different way of looking at things, and the lack of jobs is a foul cry. It is keeping jobs, it is creating jobs, and it creates jobs that we want, it doesn't create jobs that we shouldn't be doing.

DR. FENNA: Lois Fenna. I agree that I don't think you can sell conservation to people if it is going to cost them money, and I am thinking of soil particularly now. Soil conservation is very much in the papers and on the radio right now, and I don't think that the farmers are interested in it. They are not making enough money to be able to afford to take the necessary precautions, and as you were saying about the price of farm products being so low, they have to produce more in order to make enough money to pay the mortgage and the bank runs off their machinery for the next year. You can't tell them to conserve this soil.

MR. WALLIS: The whole point of the conservation strategy is to point out the problem. During this last go-round with the drought, some of the farmers -- there seems to be a common knowledge, they know what they are doing to the land, they know how they are destroying the soil, but they have got to get the mortgage payment. There has to be something in whatever is developed in the background to the strategy and that, that gives these people an alternative, because it is in the common good to search for a solution. We can go around and around and around on why people are not doing it now. The whole purpose of developing a conservation strategy is to say, what are the problems, what are we destroying, why are we selling our children's inheritance down the drain. You know, we tend to think of things as an inheritance, as something that we just pass on, but we are borrowing from our children; we are not inheriting it, we are just borrowing it until the future. Until we get that into the mainstream and ways of solving it -- we can all think of reasons why things aren't working. The thinking about the conservation strategy is to get things working the right way, not to just go over and over and say we have been over that throughout all our human history in this part of the world.

DR. MUC: Michael Muc. I think that we are dealing with things at a cerebral level, and I think what we have to do is to build up a backbone that will hold up that thinking. There are a lot of inconsistencies in our society: poachers get away with, what, a $500 fine; pollution by industry, a thousand dollars or they can go into the legal proceedings that can be drawn out for years. Society looks at that and says "what's happening; how is it that things cannot be done?" Losing enterprises in the agricultural industry are sustained by the taxpayers; they should go under. When we as a society can develop a backbone and say, no, we allow those people to go under, and we take the polluters and make them criminals, a poacher gets fined to the point where it hurts, I think people will react and say we are serious. I don't think anybody is going to stand up and say I'm going to support you in your position; until we get the backbone, nothing is going to be done.

MR. FAUSER: To enlarge that a little further, as long as that will not hurt them, they won't do anything. They think, what is wrong, I'm living happily, why bother me? Unless they see something is happening to them, they won't and the politicians won't either because they count the votes.

MR. PASCHEN: To continue what the other gentleman was saying, a $500 fine to an Indian is not the same as a $500 fine to the millionaire, so we have to look at that too. Our jails are full of criminals and what have you, and it goes back to the taxpayers again, so, you have got to keep digging to get to the roots.

MR. WALLIS: I think what is coming out of all this is that conservation groups and other groups are beginning to realize you have got to bring this to the local people. It is not just the urban people; the general public have to be involved. We have to find a way to bring these to the local and rural community and they will take it upon themselves to develop those strategies in their local areas. It is up to industry to recognize these things and apply the principles of conservation strategy as best they can even before the whole plan and strategy is outlined. There are basic principles in there which some companies feel they are doing. Some companies are doing a lot more than others, and there are some farmers' groups and that who are very much aware of the way the land can provide, but there needs to be more interaction, more going out to local groups. I haven't heard -- you know, perhaps this group is a good forum for that. I suspect it could be, given the right direction and way to go. You represent such a broad cross-section, or have representatives of such a broad cross-section of society; it's a damn good start.

DR. PENNIFOLD: Ken Pennifold from the Urban Pollution Group. What I am hearing is that we all are endorsing a philosophy; we believe in it. We fault the other person because he doesn't come along with our thinking. But there is only one man on earth who was perfect, and that was years ago, and look what happened to him. I don't think any of us would want to imitate him, but we are asking people to change, to change their ideas, and this is a really -- a threatening suggestion to a lot of people. And we cannot expect results overnight. I have been in the field of public health, and if there was ever a frustrating field, that is it, because the problems that we dealt with 27 years ago, we still have with us today. But, again, you can't give up; you have got to keep trying.

MR. WALLIS: I very much agree with that; keep at it.

MR. PATCHING: Harry Patching. I am actually a farmer, but I've lived in the city for the last eight years, so I've had some exposure to rural and urban life, and it is my opinion that rural people are much more concerned about the environment than the urban people, because it has been pointed out that there is an economic problem there, and there are circumstances that some farmers simply can't control. But really the big losers, I think, with the loss of environment, are not so much from the generation who are living on the farm now -- they will be able to survive fine -- but it will affect others further on. To me, the big losers, though, are really the consumers, and I have just found among the consumers that there is quite a resistance to environmental matters. I have the responsibility of lining up programs for one of the groups, and I suggested why don't we bring in a speaker on the environment, and, well, there was the odd one who said this group of long-haired people with beards, I don't see -- perhaps one beard. I think there is an image that has been created by environmentalists, and something has to be done before we can really penetrate the consumers, who are really, in my opinion, the biggest losers in this whole game.

MR. WALLIS: Well, I hope that we are on the start of a good road, but it's going to be a long road, and you have eminently capable people here to lead your discussions and provide you with informed opinion both at home and abroad, and I wish you every success. Thank you.

(APPLAUSE)

MR. LANDALS: I would like to thank both Cliff and Cleve for leading the discussions, and thank everybody for all their discussion comments, and I hope to see you all at breakfast first thing in the morning, all ready to go.

MR. RICHARDSON: Can I have a second here? I would like to add my thanks to you for your excellent presentation; I thought it was very good. I just wanted to remind everybody that breakfast tomorrow is on your own, but don't forget that the meeting starts at 9:00, and you do not want to be late, because it starts with our chairman's welcome, and we don't want to miss that, so make sure you get here at least by 10 minutes to 9:00.

(MEETING ADJOURNED until Friday, December 6, 1985)

MORNING SESSION – 9:00 A.M. Friday, December 6, 1985

CHAIRWOMAN DALTON: I would like to welcome you all here this morning. For those of you who were here last night, this is the second session in our agenda. We had a very good film last night called *The Road to Bali*, and a very interesting discussion afterwards. I'm sure it brought up a lot of things. As you know, the theme for our meeting this year is a provincial conservation strategy, and the whole meeting is devoted to our working out our feelings about strategy, influencing the Minister, who is with us this morning, in his thinking with regards to the strategy. Hopefully, too, this will provide a focal point for many of our activities in future years -- the theme for a lot of the study groups, and a lot of their activities. So I would like you all to keep that in mind, because many of the Environment Council Research are with us to help us with our discussions this weekend. So with that in mind, I would like to welcome you, and I would like to announce that this Fifteenth Annual Joint Meeting of the Environment Council of Alberta, the Public Advisory Committee, the Science Advisory Committee, and the Education Advisory Committee is now in session. I hereby officially call the meeting to order and officially welcome you. I would like to ask John Schnablegger to give us a welcome from the City of Edmonton. He is manager of Transportation and Planning, and, as you know, most of our city representatives are in China; he was not lucky enough to make that trip, but he is lucky enough to be with us this morning. John.

MR. SCHNABLEGGER: Thank you very much. It is my real pleasure to welcome all the delegates and participants to this meeting. The issue of your theme, the conservation strategy, is certainly one that is very timely for us, and one we are vitally concerned with. We too are struggling with this issue. The municipalities all recognize the vulnerabilities of the energy issue, we ourselves in-house, personally myself working with the provincial representatives at the moment on this topic. One of the real problems we do have is direction. We are having real difficulty in defining municipal mechanisms and strategies to deal with this, and we are really hopeful that meetings such as this will give some pretty firm direction to enable us to define those mechanisms which will prepare us for a series of eventualities however they are defined.

We spoke to the Mayor last night, and we are sorry that he could not be here personally; this issue is one that he is personally very concerned with, and certainly he has got a number of policies with respect to this issue. He has some words of advice to you; he has heard about your meeting, some of which has become very vocal. He has asked me to pass on some possible advice to you, something he finds very successful at his board meetings, and that is: you can heckle the speakers all you like, but don't heckle each other.

So, with that, I extend heartiest wishes, and I really look forward to products coming out of this particular annual meeting, and the subsequent work, so that we can begin the implementation work at the municipal level. Thank you very much.

(APPLAUSE)

CHAIRWOMAN DALTON: Thank you very much, John. I would now like to introduce our executive officer, Mr. Alistair Crerar, who will give us greetings from the Environment Council of Alberta.

MR. CRERAR: Thank you very much, Sheri, and welcome all of you to the Van Winkle. Rip Van Winkle was supposed to have been asleep for, is it 20 years or 30 years, or 100 years -- I can't remember the exact time. He was awakened by a crash of thunder over the Catskills, and he came awake to find this whole new world that had been developed while he had been sleeping. Well, I don't know whether there is any parallel or any moral, or any comfort to be gained from this, but I think that in trying to develop a conservation strategy, we are trying to look at the world like Rip Van Winkle did before he went to sleep, but then try and figure out what it is going to be like in 20 years, or 30 years, or 50 years. The thing about it, I think, is that it is a very long-term kind of look at the nature of the problem. It is not something that you turn to day by day, or that is intended to be a short-term look at things. It is intended to be a very long-term look at the implications of what it means to be on this planet in the year 2000 and 2025, and so on.

I think the other thing that I find very instructive about that is the way in which it brings together all the different parts of the Public Advisory Committees. There is a tendency, as you know, for each of you to go off to your study groups, whether it be energy, urban, or renewable, or non-renewable, or whatever, and look at the world through the focus of that particular set of problems, and that is the only way you can do it, because the set of problems is too vast, too wide-ranging. But every once in a while, you need to get back and look at where does my particular area of interest fit in with all the other parts, what does the whole look like? Looking at a series of trees gives you a very good idea about trees, but the only way you can in fact look at forests, or look at ecology, is to stand back and try and see what it is you are doing and how it fits in with a whole series of other things. That, essentially, is what the strategy is trying to do: it is trying to look at a wide range of problems and trying to relate them one to another, trying to relate protection with development, and all of these other very difficult kinds of questions that we tend to put off, but every once in a while we have to take them on and take a look at them.

So I think the theme for this conference is one of the most interesting and challenging that we have had. We have some first-rate speakers who are going to be guiding us through the approach that we are taking, because we are not alone in this; there are many others who are walking down the same kind of path, taking a slightly different approach, but, nevertheless, we can learn from them about things to avoid and things to do.

So, I extend to you the welcome of the Council; I think you're going to have a good meeting. When John was talking about don't heckle each other, I started thinking, my gosh, this is the only organization where everybody could agree but there would still be 125 different viewpoints. Thank you very much.

CHAIRWOMAN DALTON: Thank you very much, Alistair. I would just like to get a couple of announcements out of the way before we proceed. First of all, if you look at page 4 in your agenda, I would just like to remind you of two room changes: Non-Renewable Resources will be meeting in the conference room on the lower level, and the Pollution Study Group will be meeting in Room 247. Those are announced again just to remind you of those changes. If you have questions to ask of any of the speakers, I'm sure you've noticed there is a microphone back where Lub is sitting; I would appreciate if you would go to the microphone to ask your questions. It is a little awkward from the front, but it will not impede the vision if you line up more towards the back of the room. We would appreciate your using the microphones.

Now, I would like to ask Alistair to come back to the podium and introduce our speaker of the morning, Mr. Fred Bradley.

MR. CRERAR: This is the fourth occasion, I believe, that I've had the pleasure of introducing the Minister of the Environment, Fred Bradley, to the PAC and Environment Council Joint Meeting. I think at the first meeting, he had only been in about three or four weeks, and I remarked on his youth, I remarked on his experience, because he had been in politics then, even though he was -- I won't mention numbers any more, Fred, partly because I forget them -- but anyway, he had been in politics since he was about 17 or 18, and he was 32 or 33 at the time, and that meant that he was a fairly experienced politician. But the thing that really amazed me about him at that time is that he had been an MLA, and he had been an MLA for Crowsnest. Crowsnest had one of the most intricate amalgamations, you might say, from five, six old mining towns which historically have some of the greatest rivalries you could ever find, at least I found that when I was working down in Cape Breton Island. The difference between Glace Bay and Dominion, or something like that, is so wide that you wonder whether they are on the same planet, rather than just five miles from each other.

Anyway, he had put together a new municipality of Crowsnest, and it had been the work of very patiently, very carefully, very diligently putting together this very complicated structure with very little fanfare, and very little complaint, very little problems. I think he has pulled off another somewhat similar feat in his approach to the water problems in Cold Lake. There were any number of different pitfalls that could have occurred, and it seems to me in the choice of bringing water from the North Saskatchewan to the Cold Lake oil sands development, he has done a series of things: number one, he has chosen the most environmentally benign solution; number two, he has, I think, accommodated most of the concerns of the people who were there, and they had real concerns about potential environmental pollution; number three, though it is in the short term the most expensive of the solutions that were looked at, in the long term and if one has faith in the continuity of development and the length of time that that development will go on, then using the water from the North Saskatchewan will have a payoff. It will only have a payoff if you believe that this is going to be there for a good long time and there's going to be a large requirement for a substantial supply of water, but it will pay off under those circumstances.

I guess, finally, the last one was that it is not being built by the provincial government, it is not being built by any of the municipal governments up there, it is going to be built by the private operators, and it is they who are going to have to work out the agreements on who's going to share the water and share the costs, and share the operation and so forth and so on. One thing you can bet, with a number of private operators looking over each other's shoulders, it is going to be one of the more efficient water programs in this province.

So, here we have something that is good in so many ways, could have been a very bad choice, has come out very quietly and has not had -- well, I have seen notes in the paper saying, yes, people were pleased with it. But I think it is the mark of the way in which Fred Bradley operates that this decision, a good decision from the point of view of the environment, a good decision from the point of view of the economy, has been accomplished with so little fanfare. I think, because I believe it is a very good decision, that I would like to use this opportunity in introducing him to remind you of that kind of decision with which I think we can all agree. There have been decisions that we disagree with, but we won't go into that today; this is a happy occasion. So I will just mention that, and with that, introduce Fred Bradley, the Minister of the Environment, to give us the state of the environment. Fred.

THE HONORABLE F. BRADLEY: Ladies and gentlemen, fellow environmentalists, Alistair, thank you very much for your kind remarks.

When you talk about decision-making in power and arriving at decisions, I don't believe that I alone can take all the credit that you are willing to bestow on me with regards to Cold Lake/Beaver River management plan. There were a lot of people in this room, people in the communities involved giving their input, the industry giving their input; there was a lot of hard work done by the staff people in Alberta Environment who were out there in the front lines listening to the public input and coming back with recommendations. So my role was a very small part in that; there were a lot of other people who deserve a lot of credit.

I would like to start my remarks today perhaps with a bit of levity. I'm not sure whether I've told this particular story to this group before, but I think maybe it fits, in some aspects, into the theme that you are working on today.

There were four graduate students who were studying at the university over in Europe, and the subject which their professor had given to them was to write a story about the elephant and what it meant in terms of each of their country's traditions and what was important in their country. The students were from England, France, the United States, and Canada. Well, the French student entitled his dissertation, "The Love Life of the Pachyderm;" and the subject matter for the student from the United Kingdom was, "The Elephant: Its Role in the Rise and Fall of the British Empire;" and the subject matter for the student from the United States was, "The Elephant: An Economic Opportunity;" and the subject matter for the Canadian student – his dissertation was, "The Elephant: Is it a Federal or Provincial Responsibility."

Well, I note that the main theme of your conference this year is with regard to the World Conservation Strategy, and particularly the development of a provincial conservation strategy. With regard to whether it is a federal or a provincial responsibility, it is really a joint responsibility in terms of Canada, and I wish you well with those deliberations, and your input and thoughts certainly will be appreciated.

This year in my remarks I would like to focus on some of the activities of the Department of the Environment, as undertaken in the past year. I will outline some of the highlights of the different divisions in the different services within the Department of the Environment. It will be in no way a complete rundown of the Department's activities, but it will give you some idea of where we have been over the past year.

Last weekend I had an opportunity, and members of Environment, to meet with members of the Environment Network, and the subject matter, which was dealt with over a day and a half, was the subject of water. Today I would like to start by dealing with some of the activities in the Water Resources Management Services within the Department.

For many years, the oil industry has utilized groundwater for oil field injection purposes. Currently there are approximately 520 wells supplying groundwater for oil field injection, and the majority of these have operated successfully. In recent years, there has been a growing number of concerns expressed by the farming community, rural municipalities, and others regarding the use of possible groundwater for further oil field injection. After reviewing the public perceptions and concerns, the Department is developing an interim groundwater allocation policy which will give total protection in the rural community, while maintaining the important historical and legislative principles of multiple-purpose use of water, and we will be integrating with a number of groups over the next while finalizing this policy.

In southern Alberta, water management programs in 1984 and 1985 have been strongly influenced by the severe drought conditions experienced in those years. These conditions have prompted the government to take the following water management measures: in the first place, put in place emergency programs in both 1984 and 1985 to assist rural landowners and communities to secure water supplies that have been depleted due to severe drought conditions.

Secondly, announce the construction of the Forty Mile Coulee Reservoir project, and the tender was announced earlier this year with regard to that.

Also, advance the schedule for completion of the Oldman River Dam; we expect that construction will be able to commence early next spring.

Also, we accelerated planning activities in the Willow Creek and Little Bow River Basins to help resolve some serious water management problems in those two tributaries.

As Alistair has mentioned, on October 29th I announced adoption of a long-term plan for management of the water resources in the Cold Lake region of the province. The water management plan is based on long-term industrial water supply to oil sands plants in the region by a privately owned and operated pipeline from the North Saskatchewan River. It replaces the short-term plan adopted in 1983 which met the withdrawal water demands of users from local surface and groundwater sources.

Some of the key features of the long-term water management plan are: first, long-term industrial water needs for oil sands plants will be supplied by pipeline from the North Saskatchewan River.

Oil sands water users are expected to collectively fund, own, and operate the pipeline system in accordance with existing provincial statutes and regulations.

The pipeline is expected to be fully operational by the time the limits of the local water sources are reached and by 1991 at the latest.

All oil sands users with major withdrawals will be required to switch their source of supply to the pipeline when it becomes operational.

Increased recycling of produced water will be required.

No oil sands surface water discharges in the Beaver River Basin will be permitted, and there will be limits established for deep well disposal.

The state of water quality in the North Saskatchewan River from the mountains through the City of Edmonton to the Alberta-Saskatchewan border is of concern, particularly to residents of communities obtaining their municipal water supply from that source. Work is being undertaken to develop a model for predicting future water quality changes associated with various basin development/water management scenarios. Results of this analysis will form a major part of the North Saskatchewan River Basin plan. Reasons for undertaking a basin-scale water quality analysis at this time include: firstly, the Prairie Provinces Water Board is currently attempting to establish interprovincial water quality parameters.

Secondly, the two largest hydro installations in Alberta are located in the North Saskatchewan headwaters (the Bighorn and Brazeau Dams), and produce significant flow regulation, which significantly affect effluent dilution at Edmonton during the winter.

Thirdly, the long-term water management plan for the Cold Lake/Beaver River area has identified the North Saskatchewan River as the water supply source for heavy oil plants.

In the meantime, in the Peace River Basin, a sub-basin water management planning study has begun, the purpose of which is to inventory all agricultural drainage/erosion/flooding problems, and to identify solutions to these problems on a site-specific basis.

Alberta Environment has continued its managerial and financial involvement in the agricultural land base study, directed toward identifying ways of intensifying and expanding agricultural production in Alberta. This study will be completed in 1986.

The Drainage Lands Inventory Study, funded by the Alberta Water Resources Commission and Alberta Departments of Environment, Agriculture, and Energy and Natural Resources will be completed in 1986 after two years of work costing an estimated $1.2 million. This study is a significant, multi-disciplinary, multi-agency undertaking to identify the extent of wetlands in Alberta, and will provide invaluable information required to make important decisions on future drainage and wetlands management policies and programs.

Of interest to some members of the Public Advisory Committees -- I have received correspondence on it -- is the Winagami-Girouxville canal; this canal is operated to supply water to four communities and to Kimiwan Lake. Work has begun this fall, and will continue next summer, to increase the channel capacity from Winagami Lake to Kimiwan Lake, and, hopefully, increase the level of Kimiwan Lake, which has been a concern in that area.

The Environmental Evaluation Services of the Department of Environment consists of two divisions: the Environmental Assessment and Land Reclamation Divisions.

After a review of the Alberta Environmental Impact Assessment System by the public and industry, and extensive operational experience, revised EIA Guidelines have been prepared for Alberta. These revised guidelines are required to reflect current operating practice, as well as concerns expressed by industry, who have had to prepare Environmental Impact Assessment Systems, and the public who have been affected by resource developments. The revised guidelines will ensure environmental matters receive the necessary consideration in the planning, design, and review of major resource developments. I expect to see these new guidelines released by the end of this year.

There is potential for confusion and duplication of effort in the review of resource projects which have environmental implications for Alberta and Canada. We are pursuing with our federal counterpart an agreement to eliminate duplication and to strengthen co-ordination between Alberta and Canada. This agreement will ensure that the environmental assessment of resource developments in Alberta, which have environmental implications for both governments, is carried out in recognition of these implications, but does not create confusion or uncertainty for either the public or industry.

The development of the Long-Term Water Management Plan for the Beaver River/Cold Lake Basin was carried out with the direct involvement of the public in that area. The public contribution in choosing the long-term industrial water supply option for this basin was invaluable. This is the type of community participation to which Alberta Environment is committed for water resources planning and development. I'm also satisfied with the results of the various workshops we have undertaken with the public. These exchanges have helped to raise our awareness of our enforcement and water management practices, and to increase our understanding of public concerns.

Alberta Environment encourages the development of practical applications of remote sensing technology to natural resource management. We are very proud of the contribution of the Alberta Remote Sensing Centre in the development of the technical report on Alberta Rangeland Assessment Using Remotely Sensed Data. This report won the prestigious Autometric Award in 1983, sponsored by the American Society of Photogrammetry. This department will continue to support similar, worthy proposals from private industry and educational institutions to advance the applications of remote sensing technology in natural resource management.

In the area of land reclamation, the development of in situ bitumen recovery in the Cold Lake and Elk Point areas has increased dramatically in the past two years. This development pressure resulted in the need for increased surveillance and monitoring of the reclamation aspects. Consequently, Alberta Environment moved additional reclamation officers into this region to increase our capability to ensure reclamation requirements are implemented by in situ developers, and to deal more effectively with landowner concerns.

Alberta Environment has undertaken a number of reclamation projects designed to return old or abandoned landfills, sewage lagoons and gravel pits to beneficial uses. For example, abandoned sewage lagoons, landfills, and gravel pits have been reclaimed for recreational purposes for Waskasoo Park in Red Deer and North Valley Recreational Area in Lethbridge. This department has rehabilitated an abandoned water reservoir to support a regional fishery in Lamont. In Lac La Biche, an abandoned sewage lagoon was reclaimed to a condition where it could support a rearing pond for walleye. Both of these projects were undertaken in co-operation with the Fish and Wildlife Division of Alberta Energy and Natural Resources, which will operate these facilities. In Grand Centre, an old sewage lagoon was reclaimed to enable agricultural use. Undertakings such as these underscore Alberta Environment's long-term commitment to the restoration of disturbed lands to productive and beneficial use.

On an operational basis, Alberta Environment encourages resource developers to conduct their activities in a manner which promotes effective reclamation. Developers who reclaim their projects while they are in operation may do so in a more effective manner. For example, the Department has identified 1,200 sand and gravel pits now disturbing about 25,000 acres in 29 municipalities. Our staff are actively working with the respective operators to encourage them to reclaim these pits while they are being operated. This approach fosters more efficient and effective reclamation.

The Alberta Environmental Centre in Vegreville consists of four general areas: Plant Sciences, Chemistry, Animal Sciences, and Environmental Technology.

Over 3,200 diagnostic submissions, slightly more than last year, were done for insects, diseases, and weeds. The Centre provided backup to Agriculture's regional laboratories, and the Centre has extension activities to growers and producers. Research is continuing on biological control of weeds, insects, and plant diseases.

The soil group in this area is now underway. A simple non-polluting technique was found for de-watering oil sands tailing ponds, and agreement reached with Syncrude on further studies.

The reclamation group is also underway, concentrating on native species for reclamation in the Eastern Slopes, Northern Alberta, and The Southern Prairies.

The Chemistry Wing was very active in providing analysis for its users. Over 8,000 air samples were analyzed, 14,000 water samples, 2,000 research services samples, 1,500 microbiology samples, and approximately 300 samples for electron microscopy.

There was a heavy emergency workload, especially in the analysis for polychlorinated biphenyls; I am sure you understand that. The inhalation toxicology project is underway, with small-scale rodent experiments starting. The 4,000 square-foot inhalation toxicology lab was constructed and turned over to the Centre for Studies on Hydrogen Sulphide and Other Gases.

A five-year project on forestry development and wildlife resources is now in the write-up phase. Grizzly and black bears, along with LANDSAT imagery, formed an integrated program on the ecology of the bears in the study area.

A catalogue of chemical residues in Alberta waters was essentially completed. Of fish in Alberta lakes and rivers surveyed for pesticides, heavy metals, PCBs, et cetera, only one small problem was found, mercury, and it's probably of a natural origin. Work is being extended to terrestrial and avian species.

Specific problems in aquatic toxicology were also studied, including acute and immediate long-term toxicities of pulp mill effluents, municipal sludges, and coal mine flocculants.

The Environmental Technology Wing started work using the new mobile water treatment plant. The first project was research on treating water infested with giardia.

Technology for treatment of pulp mill effluents was also studied. Two treatment processes have been developed and are potentially patentable.

Studies continued on using the magnesium oxide process for sulphur dioxide scrubbing at sour gas plants. A process was also developing for removing chromium from sewage sludge.

The Alberta Environmental Centre, the Canadian Centre for Inland Waters, and the United States Environmental Protection Agency developed a co-operative program on research and solidification of hazardous waste. A patentable process for protecting concrete surfaces from freeze-thaw cycles was discovered in the course of this work.

The Centre has acquired a pilot-scale incinerator, wet scrubber, carbon bed absorber, and lab-scale thermal decomposition and stack gas analytical equipment. The incinerator research building is currently under construction.

The final service in Alberta Environment is the Environmental Protection Service. This is probably the service that is most recognized by the public as the Department of the Environment. It is broken up into four divisions: Earth Sciences, Pollution Control, Standards and Approvals, and Research Management. The areas I wish to discuss today include: Water Quality, Canadian Water Quality Guidelines, the Canadian Council of Resource and Environment Ministers' Toxic Substances Steering Committee, the CCREM Sub-Committee on Research Co-ordination, and an update on special waste management.

As you are aware, the province is participating with the City of Edmonton in a critical assessment of Edmonton's drinking water quality. Dr. Steve Hrudey, a professor at the University of Alberta, has been hired to manage the study. The study will include a review of health and aesthetic aspects of Edmonton's drinking water quality, water quality in the North Saskatchewan River, and methods of treatment. Dr. Hrudey will retain various experts on different aspects of the study, as well as requesting input from interested groups and the public at large. It is anticipated that the study will be completed by the end of 1986.

The provincial government has developed a monitoring program for giardia after the giardiasis outbreak in Edmonton in the winter of 1982-83. Monitoring was conducted on a broad spectrum of communities using surface water supplies. Samples from approximately 30 municipalities each year were taken, which included the major population centers. This is the only known program of its type in North America.

Sampling equipment was developed by Department personnel, using the latest filtration technology. Analysis was performed by the Provincial Laboratory of Public Health in Edmonton. Over 650 samples were collected.

Only three samples were found to contain organisms suspected to be giardia cysts. The follow-up sampling at these sites failed to confirm the presence of the organisms. There was no epidemiological evidence to suggest the presence of giardia cysts in the water.

The Department is also involved with the City of Edmonton in a review of sanitary sewage discharges to the North Saskatchewan River from sources other than the sewage treatment plant. We have been looking specifically at the storm and combined sewer systems. The objectives of the study are to identify sources, determine their significance, and develop a program for their elimination or control. A number of sites have been identified and the investigation is continuing.

During the 1983 Canadian Council of Resource and Environment Ministers' Meeting, a task force was set up, chaired by Alberta, to look at water quality guidelines across Canada.

The two task force reports, entitled *Water Quality Guidelines Inventory* and *Emerging Water Quality Issues,* were published and distributed. A work plan and a technical review group has been structured to review the preparation of the *Canadian Water Quality Guidelines.* The guidelines will be published in a third report which is scheduled for completion in 1986, and is to be presented to environment ministers at their 1986 meeting.

In this publication, the recommendations and supporting rationale for each water quality parameter will largely be based on existing data from national and international sources. For each use, only those parameters of concern to a particular use will be dealt with. The uses identified by the task force previously will form the main chapters of the guidelines. These chapters will ascribe parameters to cover uses relating to raw water for drinking water quality, recreational water and aesthetic values, aquatic life and wildlife, agricultural uses and industrial waste supplies. The data will be reviewed to determine their appropriateness to Canadian conditions. It is anticipated that information gaps will be identified and that research priorities will be incorporated into a separate report and submitted to the environment ministers along with the guidelines document.

The Canadian Council of Resource and Environment Ministers have also established a Toxic Substances Steering Committee. The Ministers discussed the crucial issue of toxic substances management during their 1984 annual meeting, and the growing concern among Canadians about these substances. Ministers shared these concerns and responded by establishing a steering committee of senior officials and giving them the task of examining the relevant issues and proposing policy advice on the management of toxic substances.

The Committee met for the first time in January, 1985. All participants agreed that the management of toxic substances should be pursued throughout the life cycle of the chemical. The Committee agreed to adopt this framework and to study how toxic chemicals are managed throughout their life span, that is, from the research and development stage to their ultimate disposal. In using this approach, it is possible to identify any weaknesses in the system and then to suggest changes in existing policies or regulations. The management of toxic substances is such a vast field of study that the Committee recognized the need to concentrate its efforts, initially, on the most pressing subjects. These included: firstly, a comprehensive approach to polychlorinated biphenyls; secondly, hazardous waste management; thirdly, potable water quality; and fourthly, pesticides and public acceptance.

The Steering Committee on Toxic Substances plans to concentrate its efforts in the coming year on the completion of several projects. This will include the various PCB initiatives, the further study on the lack of information and data concerning the impact of toxic substances, and any other subjects referred to it by the Council of Ministers.

Another important step taken by the Canadian Council of Resource and Environment Ministers was the establishment of a Sub-Committee on Research Co-ordination.

Many environmental threats exist or are emerging which require research and development to help define, monitor, and control. The Canadian Council of Resource and Environment Ministers structure provides the vehicle to better co-ordinate environmental research and development in Canada.

As a first step and case study, the initial focus will be on better co-ordination of environmental protection research and technology development.

Environmental Protection R and D has the potential to improve environmental quality and to contribute to economic goals by promoting a clean industry which can provide state-of-the-art expertise and equipment at home and abroad.

The Research and Development Committee will be responsible for: firstly, better co-ordination of federal and provincial environmental protection and research and development programs; secondly, preparation of a report and recommendations on ways of stimulating increased environmental protection research and development in the non-governmental sectors; and thirdly, possibly co-ordinate research and development throughout Canada.

The Province of Alberta is represented on each of these three committees referred to previously. I believe the co-ordination of efforts by provincial and federal environment departments to try to find solutions to the problems of environmental pollution in our country is an important step.

Finally, the Special Waste Management Program in Alberta continues to make progress in establishing a system, a treatment and disposal facility, and improving storage conditions, while encouraging and conforming to regulations which improve the handling of special waste materials in our province.

Some of the activities that I wish to report to you include an update on the Swan Hills facility. Access to the site near Swan Hills is now on a good gravel, standard road, and utilities have been installed to the site. Water wells have been drilled and licences have been applied for. An air quality and weather monitoring unit has been installed and is operational. The laboratory administration building is now under construction, and construction will continue next year on all buildings, including treatment structures. The process selection is underway using team evaluation for decision-making.

Original water monitoring programs have been augmented and new data has been received. First reports from ongoing water monitoring systems will be out in the new year. Air monitoring has begun with the installation of a new data collection station on the site.

The Hazardous Chemicals Advisory Committee is currently working on reviewing and making recommendations to myself on regulations under the Hazardous Chemicals Act. This process appears to be working well, and enables the public to have input into the regulation-making process.

It is recognized that Alberta is a leader in siting and development of a special waste management system. Alberta will continue to seek public encouragement and support in all aspects of responsible waste management, including waste reduction and recycling.

The last area I wish to deal with today is on the subject of environment awards. I have held meetings with Mr. Crerar on this matter and wish to advise the Environment Council of Alberta and the Public Advisory Committees of our agreement on environmental awards. A review committee will be established to put in place the environment awards for Alberta. I anticipate that three categories of awards will be initiated, which will include individual citizens, technical excellence, and environmental education. It would be anticipated that one award would be given for each section, if an appropriate nomination was received. Also under consideration are honorable mentions for regional nominees.

It would be my anticipation that environment awards would be presented during Environment Week every year.

The Review Committee would be responsible for developing a brochure and nomination forms for these awards. The closing date for 1986 awards would be February 28th, 1986. The Review Committee would recommend to me a short list for each category, and then a final decision would be made. I believe that this should be a very high-profile item, as there is much excellence in Alberta in the field of environment, and some individuals should be recognized for their hard and diligent work.

In closing, I would like to thank you for the opportunity to address your annual meeting, and wish you well in your deliberations on resolutions and other matters that will be raised over the next two days. At this time I would like to open the meeting up for questions from the floor.

Thank you very much.

(APPLAUSE)

CHAIRWOMAN DALTON: I would just like to remind everyone that if you're asking questions, we would appreciate your using the microphone in the aisle.

MS. ROSCHLAUB: Judy Roschlaub, Pollution Study Group. The Alberta Environmental Centre out at Vegreville did a study of fish downstream from the Proctor and Gamble pulp mill three years ago. Editorial touchups were given last year as a reason for the delay on the fish tissue; it still hasn't been released. Is there something fishy going on here, or does the report show no ill effects on the environment?

THE HONORABLE F. BRADLEY: I'm not sure what the delay is in terms of the delay of that report, but I will look into it for you. I have no knowledge of why that report has not been released yet.

MS. ROSCHLAUB: When a study is done, what would you say is the average length of time as to when it can be reported to the public?

THE HONORABLE F. BRADLEY: In my view, once you undertake to do a study and the scientists come in and they do their technical review and look at all the details, that takes some time. That seems to be the major delay, in my judgment, the ability of the scientists to do that review work and to put the final touches on it for release.

MR. FAUSER: Horst Fauser, Environmental Protection. I have two questions. Have you gone into any research into public hearings on recycling? It would fit well with our conservation strategy.

THE HONORABLE F. BRADLEY: Could you repeat the first part of the question, please?

MR. FAUSER: Could we look forward to public hearings in the near future on recycling?

THE HONORABLE F. BRADLEY: Certainly we have announced that there will be public hearings, and we are currently trying to put together the panel which will be the hearing panel. We haven't finalized the selection of our hearing panel yet.

MR. FAUSER: Thank you. The second question: how far is the Department in setting minimum flows on our rivers? Our first public hearings were in 1978 on Willow Creek in Claresholm, and we still have not had any indications on minimum flows on our rivers.

THE HONORABLE F. BRADLEY: That subject was raised last weekend, and an extensive amount of time was spent on a workshop with the Environmental Network, and they discussed it. We are working on that; I can't say when it will be completed in terms of coming up with in-stream flow requirements. It is a very complicated area, and it is not an easy one to resolve all the issues involved there. But we are looking toward that, and we are studying that, and we will be continuing to work with different groups to come up with those types of requirements.

MR. FAUSER: I realize now it is -- '78 and '86; it is eight years now that your department is involved in it. Thank you.

THE HONORABLE F. BRADLEY: I appreciate that, but in terms of where jurisdictions are at, in terms of specifics in Canada, I think we are as far ahead as any of them in terms of coming up with those requirements.

MRS. BROADBENT: Dorothy Broadbent, Environment Protection Study Group. My question is in regard to the Drainage Lands Inventory Study, which you mentioned; I believe it is a joint undertaking between Alberta Environment and Alberta Water Resources Commission. Although there are answers for the partial and complete mitigated measures with regard to drainage projects in the river basins of Central and Northern Alberta, the environmental value of wetland ecosystems is not recognized, and my study group is very concerned that the mitigating measures will not really take into effect the great value that we place upon wetlands. But the major concern of this study is to document the number of acreages available for drainage for agriculture. We feel there should be some value placed on the wetlands ecosystem, and this is not being done.

THE HONORABLE F. BRADLEY: The purpose of the study was to prepare an inventory to identify what in fact is there. I appreciate your comments.

MRS. BROADBENT: What acreages are available for agricultural development, not what wetlands are there, and what these wetlands contain, other than agricultural lands. We feel this is a grave omission, especially in light of the disappearing wetlands at the moment.

THE HONORABLE F. BRADLEY: I appreciate your input, Dorothy.

MRS. BROADBENT: Thank you.

DR. KOSTUCH: Mr. Minister, I'm very pleased that the guidelines will be released before the end of the next year, and I would also like to again commend you for the excellent water workshop we held last weekend; I think it was a very good opportunity to get public input. The question I have: I am not very familiar with the Milk River area, and I would like to know how much land that will be irrigated by the Milk River, by the Milk River Dam, is owned by the local MLA.

THE HONORABLE F. BRADLEY: I don't have any information on that subject.

If there are not any further questions, I appreciate the opportunity to meet with you and discuss these matters with you. I think Sheri has made a good point -- the evening banquet meetings certainly did have a much more lively aspect. I am not that great a morning person myself, and I can understand.

Well, thank you very much for the opportunity to meet with you again this year.

(APPLAUSE)

MR. RICHARDSON: Thank you. It is my pleasure to thank you for coming and spending this time with us. We appreciated your state-of-the-environment talk and your frank comments. I think perhaps one of the reasons there were not very many questions is that maybe you are making some progress. At any rate, most of your environmental activities seem to be positive, and you seem to be, I think, getting more of what we like to hear: some public input into it. I know you get some letters from our group that at times may seem that we are trying to confront you; I don't think we are. What we are trying to do is act as a public conscience for you and to help you and the other ministers. We appreciate the good relationship we have had with you from the standpoint of the Co-ordinating Committee. You listen to us, you answer our questions very frankly, and I just wish we could get the same co-operation out of some of the other ministers.

You promised that at a future meeting you would attempt to get a couple of your confreres to come and meet with the Co-ordinating Committee, and I hope we can hold you to that in the new year, because we would very much like the opportunity to talk to some of the other ministers. I think you can get a much better working relationship if you meet with them.

We thank you for changing the time. We wanted to try to have you as a part of our meeting rather than as an after-dinner speaker, and we appreciate the fact that you accommodated us, and of course you are invited to our banquet -- we will be very happy to have you there -- and to any other parts of our meeting that you have the time to spend with us. Thank you very much for your talk, Mr. Bradley, and we look forward to working with you in the new year.

CHAIRWOMAN DALTON: We will now be on a refreshment break; we will reconvene at 11 o'clock. The coffee is not due to arrive until 10:30, so if you can stand it till then, and we will see you at 11:00.

(REFRESHMENT BREAK)

CHAIRWOMAN SNYDER: Good morning, ladies and gentlemen -- I mean men and women. I am Joan Snyder, and it is my privilege to introduce to you today David Munro, who is your keynote speaker. He is speaking on National Perspective to Conservation Strategy. I would like to give you a little bit of background on who he is and what he has done, so to speak. He was born in Victoria, British Columbia a few years ago. He obtained his Bachelor's degree from UBC in 1947, and a PhD in Zoology and Geography from the University of Toronto in 1956.

For the next 20 years -- well, not the next 20 years, but for 20 years of his life he was with the Canadian Wildlife Service. He started working for them when he was a graduate student as a wildlife management officer in Western Canada, and he worked primarily with waterfowl, but he did some work with one of my favorite animals, the caribou. He did a survey with the caribou in the Yukon Territories.

Then in 1953 to 1963, he planned, directed, and supervised the migratory bird research throughout Canada as Chief Ornithologist with the Canadian Wildlife Service. Then from 1964 to 1968, he was the director of the Canadian Wildlife Service.

Then he moved into the field of Indian Affairs, and for a few years he was Director of Community Affairs Branch and Assistant Deputy Minister responsible for Indian consultations.

Then he moved on to a responsibility which involved policy analysis, planning, and programming for the Fisheries research and development activities with the Fisheries Service in Canada.

Then between 1972 and 1975 he was Director-General of Intergovernmental Affairs for Environment Canada. During this period, he attended some conferences, one of which was the Stockholm Conference on the Human Environment Program in Nairobi, Kenya.

From 1977 to 1980 he was Director-General of the International Union for the Conservation of Nature and Natural Resources; his headquarters were in Switzerland for that association. At this time, he directed the preparation of the World Conservation Strategy.

Since 1980 he has been a consultant in the fields of environmental and renewable resource research and management, and he is involved in the development of a conservation strategy for British Columbia.

I am very honored to introduce Dr. Munro as our keynote speaker this morning.

(APPLAUSE)

DR. MUNRO: Thank you very much, Joan, and good morning ladies and gentlemen. I am very happy to be here, because I take a keen interest in seeing what is happening in developing a conservation strategy in various places around the world. I listened to what you said in your first session last night with a great deal of interest, particularly because it seemed to me that almost immediately you began thinking about some of the very fundamental conceptual questions that really underlie the preparation of a strategy.

I think it is fair to say that, as far as Canada is concerned, you have advanced further and more quickly in preparing a provincial conservation strategy than any other province. I think a good deal of this has to do with the fact that you have an Environment Council, and that you have your PAC; you have the institutional structure which enables you to get it off the ground in the way that I think is the envy of other areas of Canada. You are very fortunate.

But, you had better resist feeling complacent about it, because you do have some way to go yet; I think it will turn out to be almost a continuous process. So, while I think you can congratulate yourselves, do not rear back and rest on your laurels.

I take it that a keynote speaker is supposed to be provocative, if not necessarily encyclopedic or comprehensive. I am going to touch on a number of things that you may not -- I will mention a number of concepts that I may not necessarily believe in, that I may still be thinking are things that should be examined. I mentioned these because I think they are questions that all of us should think about; you will recognize them as they come along.

I may ask questions without providing answers. I won't apologize for that. Questions without answers reminds me of a person who took up skydiving, and he got instructions that the technique was to jump out, to count to ten, and to pull the cord like this, and then everything would be fine. But just on the off chance things did not work very well, he was to reach over and find this ring on the other side of his chest and pull that, and that would be the emergency control device that would enable him to float gently to earth. So on his first flight, he jumped out; he counted to ten; he pulled the cord; nothing happened. So he pulled the other cord; nothing seemed to be happening, and all of a sudden he was aware that there was another body coming upwards at almost the same rate as he was descending. As this man came up he said, "Hey, do you know anything about parachutes?" The guy said, "No, do you know anything about gas barbecues?"

So some questions don't get answered. When I had the great pleasure of meeting with the Renewable Resources Committee earlier this year, I took a little time to talk about the history of the World Conservation Strategy, and indeed about the organization that was primarily responsible for it, IUCN. I'm going to repeat that in brief now, even though some of you have heard it, because I think it is instructive.

IUCN, the International Union for the Conservation of Nature and Natural Resources, was formed in 1984. It has taken almost all of the century with rather fruitless preliminary efforts to try to get an international federation of organizations and states to devote itself to the notion of nature conservation. It finally came about because you had the right man in the right place, which was Julian Huxley, that very famous biologist with the wide-ranging mind who was the first Director-General of UNESCO, who took the action to fund a meeting that actually created IUCN in 1948. It was then called IUPN, the International Union for the Preservation of Nature, and it was concerned primarily to prevent the extinction of species, and the species with which it was concerned were those very visible birds and mammals that first provided people's entry into the notion of enjoying nature. And also, of course, there was a concern with protected areas in national parks.

IUPN pursued these sort of objectives, objectives related to these ideas, for about 20 years, and times change and people change, and the people who were then prominent in the organizations realized it was time to broaden their sights a little, so they changed their name to International Union for the Conservation of Nature, implying thereby that they were concerned with wise use, not just with preservation, and they added Natural Resources to the title of the organization.

This was about the time that there were some prominent Canadians who were interested in it. Dr. Bill Fuller from the University of Alberta was one, and Dr. Ian McTaggart-Cowan from the UBC was another; he was the vice-president at one time. So that took us to 1968. Well, then, during the '70s, and particularly following the Conference on the Human Environment in Stockholm, when conservationists and people concerned with the environment first became conscious of the fact that -- at least those people in the Western world first became conscious of the fact that there was another side to the coin, that there was literally a population of billions in this world who couldn't take any intelligent interest in conservation because they didn't always get enough to eat every day, who couldn't really share these concerns because their concern was survival; what they needed was development.

This idea began to impinge on the consciousness of the environmentalists and conservationists in the West during the '70s, and in the IUCN. It took the form of questioning how conservationists could be accommodated with the notion of development. To that impetus was added a feeling of some concern that, really, over the preceding decade, the organization had not made the progress that it should have in staving off the extinction of species and ensuring the preservation of protected areas, of the establishment of sufficient number of parks and protected areas. So this led to the idea that there should be a search for a synthesis of the objectives of conservation and development. This began about 1975, and it took five years, and the outcome was the World Conservation Strategy.

The process was an intensely elaborate one. It began within IUCN with a steering committee of persons who were well qualified in the field. It enlarged to involve consultations with United Nations organizations, notably UNEF, UNESCO, and FAO. At one point, one of the early drafts of the strategy was circulated to 1,200 people, 1,200 professional people around the world, for comment. The later drafts were reviewed by a very carefully chosen panel of 10 or 15 people, and it was reviewed at one of the general assemblies at IUCN. It was reviewed by one of the organizations I have mentioned, the FAO of UNESCO. What finally emerged, I think rather remarkably, was a document that not only had the support of a very broad constituency, but in the process of achieving that support, had not lost all its teeth, nor had become totally bland and useless. It did get a good public reaction when it was launched, and I think even more surprisingly, now, five years after it was launched, there are still people who are concerned -- in fact, the number is growing -- with how do we put this into effect; how do we follow up on this; how do we use this concept for sustainable development for human welfare.

So I think that demonstrates that it is a pretty good basis for conceptualizing, planning, and managing environment and resources.

What did it do that had not been done before? I suppose the main thing -- I don't know that it really did anything that had not been done before, but it did perhaps bring into a more clear focus the need to not only integrate the notions of conservation and development, not only demonstrate that you could not have development that was any use unless you conserved at the same time, but you couldn't have conservation unless you allow people to develop in order that their basic needs could be met. We also demonstrated the importance of an integration of the various elements of soil conservation, forest conservation, wildlife conservation, protected areas management. It showed the interrelationships, the basic unity of all these activities. It showed as well, I think -- and this has also been a lesson of other actions in the environment field during the time -- the importance of thinking globally, both geographically and conceptually, but acting locally.

Well, now, over five years since the strategy was launched, there will be -- we are in the midst of planning for an international conference, which will be held in Ottawa, 31 May to 5 June 1986, to enable the exchange of experience among people who have been trying to implement the World Conservation Strategy, and to try to reach some conclusions with respect to various aspects of conservation that were not thoroughly dealt with in the strategy. Just for example, and I will come back to these in a moment, these included the economic aspects of conservation, the relationship between conservation and tradition and culture, the population question. These were points that were touched on only very lightly in the strategy, and regarding which it is now clear they need to be dealt with in a more thorough fashion. These will be the topics, among others, that will be covered in the conference in Ottawa next year. And the output will be a series of recommendations and guidelines for effective implementation of the strategy, and a thin volume that would be considered as a supplement to the World Conservation Strategy that will deal with these issues that I mentioned a moment ago, and I will come back to them.

The program for the conference is as follows: it will begin with plenary sessions on national conservation strategies -- and there will be case studies presented -- and on different ways of approaching the achievement of sustainable development: strategies developed by sectors, strategies related to certain biotic areas, and so on.

There is planned a special event, an afternoon that will be devoted to an examination of the crisis in Africa, the crisis of environmental degradation leading to famine, in a significant section of the conference, and some very prominent people from Africa and elsewhere are expected to take part in that. There will be a session on the global institution that affects conservation, that is, the laws and treaties, the provision of development assistance, and so forth.

There will be a session on integrating conservation and development; there will be a session on spreading the message -- this is perhaps the area where we have failed most miserably ever since we first thought of the notion of conservation.

More importantly perhaps than the plenaries -- although I think we made arrangements for some excellent speakers -- will be workshops. There are presently plans for 20 of them running concurrently, each having a three-hour period. There will be three afternoons; we will have nine hours during which we will examine topics that I will mention in a moment, reach conclusions, recommendations to put to the final plenary, or agree on the outlines of statements with respect to these missing areas in the strategy -- economics and culture and so on.

The workshops: I will just mention some of them because I think this is a way to indicate to you what the world is thinking about in terms of sustainable development these days. There will be two workshops dealing with national conservation strategies. One will deal with strategies in unitary states, and the other will deal with strategies in those countries that prefer the interesting complications of divided jurisdictions, like Canada and Australia and the United States, if they show any interest in it, the Federal Republic of Germany, Malaysia, and so on.

The case that I think is interesting -- the case studies that will be presented in the plenaries are probably going to be Nepal, Vietnam, Australia, and Zambia. Australia has done exceedingly well. They are one of the first to complete a national strategy, and several states have done well, notably the State of Victoria, which has produced a document which examines and identifies conservation and development issues, and proposes policies, both short-term and long-term, to respond to those problems. It is a good and useful document.

Vietnam, I think, is very interesting, because their situation is terribly complicated by the aftermath of the exceedingly destructive hostilities that took place there over a period of ten years.

Nepal is interesting in many ways. It is interesting in one sense, I think, because it was there that I had an interview with the person who is called the Secretary of the Department of Finance, the Minister of Finance, a position corresponding to Deputy Minister. I was there to try to convince the government that certain people in Nepal who thought this should be done were right, and how IUCN and U.S. aid could support them in undertaking this activity. I explained what we had in mind to the Secretary of Finance, and he looked at me and said, "Gee," -- they don't say that in Nepal, but anyways -- "My goodness, that would help me to determine my priorities." I thought that was rather nice. I think he believed it; they are still working on it in Nepal, so perhaps he put his support behind it.

Another particularly interesting strategy is the one being done by people in the Netherlands. It has a very interesting feature to it in that, recognizing they are an exceedingly small country, highly developed, prosperous, depending to a great extent on international trade both for its income and for provision of its basic needs, they have examined a number of commodities and the environmental conservation implications of their trade, their demand for certain commodities that are produced in other countries, and this takes them, in a sense, into looking at the areas of question such as: because we consume so much of a certain product, this has an effect on the ecology of this other part of the globe and that other part of the globe and so on. It is a very interesting, I think, useful exercise and an exemplary one.

There is going to be a workshop on regional strategies, with the example being the circumpolar north. I can't remember the title of the institution, but there is an international organization of the Inuit, and they are very active in preparing themselves for this workshop.

Now, there will be workshops on sectoral strategies. One that I think is potentially exceedingly important is tentatively entitled, "Sustainable Development and Peace." We have the co-operation of the Stockholm Institute for Peace Research in developing this workshop. In my view, this is something that is well worth exploring further. I think there is good evidence that it is very difficult to achieve sustainable economic and political conditions in countries unless conservation is achieved. If sustainable political and economic conditions are not achieved, there will be the likelihood of disturbances, violence, insurrection; we have seen this in places in Africa, in Central America. The purpose of this workshop is to try to define more clearly the relationship between sustainable development, conservation, and peace and stability. This may turn out to be a very important thing. As a satellite to that -- but it is pretty important -- if we can possibly find some way of diverting the funds that go into armaments, even a fraction of them, to the rehabilitation of the environment, I don't say we would be home free, but we certainly would be able to solve a lot of the problems.

There will be a workshop on development and conservation assistance; this will look at the policies that various countries and multilateral agencies such as the World Bank have followed over the years in funding development: what have been their objectives, to what extent have they taken conservation and environmental considerations into account in both the planning and execution of their projects. This is a subject that is certainly worth examining. We know, for example, with respect to CIDA, that CIDA had made confirmations with respect to the desirability of incorporating environmental concerns into their development projects; on the other hand, they claim, with some justice, that it is not up to CIDA to determine exactly how projects should be undertaken in the countries; it is the responsibility of the host country. But using that as an example, it does seem that there has been firstly an insufficient emphasis on environmental rehabilitation and conservation in CIDA projects, and, second, there has been insufficient attention paid to promoting developing a broader awareness of the need to incorporate conservation considerations in all development projects.

There will be a workshop on sustainable development in relation to ethics and culture; I think this is exceedingly important. Last night we heard some discussion about the fact that maybe what we were doing in thinking about a conservation strategy is thinking about changing people's minds, their fundamental attitudes, and maybe this was very threatening. I don't know whether the speaker was saying it is going to be difficult, or whether he is saying it's too difficult; we better back off. But in any event, this workshop will look at those sorts of questions. It will ask whether or not, in the jargon, the paradigm needs shifting, does our whole view of the world need to change. Can we achieve sustainable development if it does not change? Do we need a sort of change in attitude that is comparable with that that took place at the time of the Renaissance when people changed from believing -- in the Western world -- when people changed from believing basically that they had no control over events to the conviction that perhaps as a result of knowledge they could influence events. This was a major change in the world, and we are still living with some of the consequences of it.

Maybe it's a change such as that of which the American Revolution was the major manifestation. I don't think we should shrink from that thought. I think we should think it over carefully. I don't think that we should take as a given that things are always going to be the way they are now with respect to our values, our culture, or the main instruments that we use in order to determine our future. If we think a little bit and look at history, I don't think we will be sure that things will change as a challenge to think how they should change.

Certainly there are very important relationships between the way we think about our environment and the way we use resources, and our value systems are related and these are not the same all over the world. Nor even are they held unanimously in a country; there are people, notably among the native groups in Canada, who have totally different views from those of the majority. We need to examine these; we need to try to decide what sorts of values, what sort of approaches will have the most enduring beneficial effect.

There will be a workshop on economics and sustainable development, which I think will be equally significant. Great concern is always expressed when one starts talking about things that should be done about the economic aspects, and this, of course, is true. We need to assess our plans, we need to evaluate our actions, we need a little more than we have to look back at what has been the consequences of some of our development aspects. I don't think we should be intimidated by the thought that everything is dependent upon economics. It is not precisely an exact science; we don't really need to feel that perhaps ecology is a very soft science in that our ability to predict changes in the function of ecosystems as a result of development is really not very good. The economist's ability to predict what is going to happen as a result of development is not very much better at all.

So, I am not saying this to be combative; I am simply saying that I don't think that we should feel that because an economist says something, that is one that raises his left hand, that necessarily the matter is closed; there are questions to be asked.

I think that there is a most significant challenge that faces economists if we can ensure that they take it up. They have to overcome the inability of their discipline to deal with the long term. Most economic assessments do not deal with the long term; they are based upon the discounting of the future at rates which vary, for reasons that are pretty complex. Certainly when you have situations where the main concern of decision-makers is to pay off, retire advertisement investment in a period of 15 years or something, because we have got a pretty high interest rate, we are totally ignoring the implication of that investment in respect of ecosystem processing, which takes place over a much, much longer period of time. And if we are to make good decisions, it is up to the economists to work on their discipline to try to find some way of helping us to answer the questions that relate to long-term effects.

They need also, I think, to overcome an inability to deal with non-market values, and they do try, but I don't know that they have satisfactorily -- reached satisfactory actions in this respect. It does not seem to be possible to put the sorts of values -- and I'm not just talking about values that reflect our aesthetic views of things, not just questions of beauty and appreciation and so on, but questions of the unmarketable services that are provided by ecosystems; the values of forests, for example, in protecting watersheds. I suppose, I'm sure that somehow or other we can, with a will and with diligence and intelligence, divise economic processes that will enable us to put values on those, but we better start doing it more quickly than we have done.

There will be workshops on indigenous people on conservation, on the management of common property resources, on population as conservation. At the time that the strategy was being prepared, we were quite frankly afraid to deal with this in the conservation strategy in a detailed way. It is mentioned there -- the relationship between population, per capita demand, and resource use is mentioned, but we thought that we were biting off enough at one time. You can only advance so far in any one jump, and we thought that to deal comprehensively with population would be counterproductive. It is different now; I think people are quite ready to deal with it in most parts of the world, although you wonder. At the last population conference a year ago in Mexico City, the delegate from the United States thought that the population problems could be properly left to be disposed of by the forces of market.

There will be workshops on spreading the message, and on the evaluation of sustainable development. I think the one on spreading the message will be exceedingly important. Obviously the fact that conservation has not achieved more than it has in the past 85 years is because we have failed to convince people of the necessity of the actions we propose as indispensable. We have to learn more about how you spread the message and how you influence people.

So that is what the conference is going to be about. I think it is going to be a constructive one. I think it is going to be a useful one. We expect about 350 delegates from all around the world, plus possibly 100 observers, most of whom we expect will be from Canada and the U.S. If those are small figures, it means, you know, we wouldn't expect that everybody in this room could represent Alberta there, and I'm sorry, but it has to be a conference that gets people in groups where they can in fact reach decisions and make recommendations. The week after our conference there is a Fate of the Earth Jamboree being held in Ottawa that is going to attract between one and two thousand people. It will draw probably more media attention than our conference will, and it may do a lot for spreading the message. It won't, I would suspect, deal in the same depth or with the same conciseness with some of the issues that I have been talking about now. So there is a need for two kinds of conferences, and the one I'm talking about is much more of a working conference, and it must perforce then have rather limited attendance.

Nonetheless, there will be invitations to people in Alberta to take part in the workshop on conservation strategies in federal states, or otherwise as they may choose.

What about your next step? I guess a keynote speaker is supposed to pay some attention to that. Well, I noted the resolution that is attached to our documents, asking the government for approval of public hearings on the idea of the Alberta conservation strategy. I applaud this totally. I think it reflects what I feel you must believe, and what I think is important, and that is that the process of developing the strategy is exceedingly important.

The Secretariat of the Environment Council has done exceedingly well in preparing a prospectus, but we cannot leave it in their competent hands. It must be a process that spreads out through the Public Advisory Committees to the public at large. This, as you know -- I don't need to lecture you on this, because you have been along this route -- but it is a difficult process, it is time-consuming, it may need to be repetitive because there seems to be a need in these sorts of exercises to go through one period in which they state their position and vent their frustrations, and another period in which they try to understand what it is you are talking about, and a third period in which they come to some constructive conclusions. Anyway, I hope that the resolution is accepted, and I look forward to a great deal of progress.

I think it is worth just thinking about a couple of points I would like to draw to your attention, which is an awkward way of getting out of this hole, I guess. The times of today are interesting; we do seem very definitely in Canada when we go from Liberal to Conservative and from Conservative to Liberal, really to be drifting towards a political small "c" conservativism, and obviously we are shifting towards a period of restraint in respect to these programs and expenditures. This has implications for what we may try to accomplish in terms of conservation. I don't think the implications are necessarily bad, despite Susanne Blais-Grenier; after all, she was relieved of her responsibilities. I think the point to remember about -- you know, political approaches shift; the public does sort of weave a path like this down through the corridors of history, and financial fortunes rise and fall; but the dynamics of ecosystems are changeless, our dependence on them is changeless, so our need to understand them and manage them is not one whit less important now than it was ever before. In fact, it may very well be more so.

It is always customary to wind up a talk like this by saying think about your grandchildren, think about the future generation, future generations. You know, it's practically the all-time cliche; it is too bad, because it does reflect a truth. When you are talking to people about conservation, the need to achieve sustainable development, when you as people who are particularly aware of it and our community leaders and are out trying to bring them around to your way of thinking, you can talk the need to manage resources so there will be something left for our grandchildren, to manage the environment so that they have a place to live that they will enjoy. And you can say that will roll right off their backs because they have heard it before; you have to try to employ a special way of mentioning that. Ask people to think about it, ask people to visualize, to see right here and now what their children or their grandchildren are going to be living in. Ask them to try to visualize it. It is a real thing; we do have a concern for the next generation, but we tend to express it in as automatic and routine a way as a man at the end of a prayer, if any of us pray any more. So I think you have to emphasize this: it is really our responsibility to ensure that our children and our grandchildren have a reasonable world to live in.

Thank you very much.

(APPLAUSE)

CHAIRWOMAN SNYDER: Thank you very much. That was very interesting and enlightening, and I'm sure the conference is going to be a success. If there are any questions or comments from the audience, we would like to hear them now. Dr. Munro would like to hear from you, and please use the microphones for your comments.

MR. DUNKLEY: Chris Dunkley, Non-Renewable Resources. David, I would be accepting the fact that there is a carrying capacity limit on any environment. Would you mind sharing with us your views on population control of the world, which I think is a major issue.

DR. MUNRO: Well, it is a major issue; obviously I agree with you that there are limits to carrying capacity, although we don't always know what they are. We are able somehow or other, and have been able in the course of history to satisfactorily support larger numbers of people on the same resource base, so I don't want to say carrying capacity is expandable, because it isn't. But there are ways that we can manage our affairs so that we can support larger populations over time. But there is an end to it, of course, and I agree with you that practically everywhere in the world it is appropriate that population should be stabilized. I don't like the term "population control" because it conjures up images of all sorts of unpleasant operations imposed on people and all that sort of thing. But I agree that it is a vital necessity.

I think also it is true that in many parts of the world that don't have some kind of a social security/welfare support, the future of people is seen to be in their having enough children to look after them. This is quite obvious. Therefore, it will not be possible to achieve a significant degree of population stability until people are in a position that their own security has been obtained. So this is why it is important to link information about family planning, information that will enable women to achieve a more appropriate place in society, with efforts for development to ensure that people's basic needs are met.

MR. ROSS: Bill Ross, Pollution Study Group. Your mention of Africa brings to my mind surely one of the major conservation challenges in the world -- the loss of productive farmland to desert. I would have two interconnected questions: the first is, do you see a risk of this in our southern prairies, and what can mankind do about it to stop this process?

DR. MUNRO: I suspect there is a risk, yes. There certainly is in -- well, the United Nations Conference on desertification six years ago, I guess it was, drew up a map of risk of desertification, and in North America the center of the risk of desertification is in the southwest, yes, but it spreads out, and the southern prairie provinces are an area which is considered. I guess it is a low-rated risk, but it is there. I think it is quite possible, and again we have only to think of history and the fact that areas in the Middle East and in North Africa, which 3,000 years ago provided through dry farming tremendous crops of grains similar to what we grow now, are now deserts, or in arid areas where production is limited to that of grazing animals. I think there is a risk. What can we do about it? I know perfectly well what to do about it technically; there are many techniques for combatting soil erosion, salinization, and for maintaining soil fertility. What we don't know how to deal with is how to deal with it economically, and I think this is another example where economics and our particular value system has not served us well. I am glad you brought this up; it enables me to say something which I was going to say during the speech, and I forgot. Maybe it was the telephone call. It seems to me a system that says, that operates so that the average salary of major-league baseball players is $350,000 or $400,000 a year has certain inadequacies when at the same time it does not really enable the small farmer, not an industrial farmer, but a small farmer, an average farmer, to feel secure with an income and benefits that are the average of those of an industrial worker. Because of that fact, and this was mentioned last night, farmers are not only loath to -- well, they are not loath to, they just simply find it very difficult economically to take the sort of steps in managing their enterprise that should be taken in order to ensure conservation and to hold back the degradation of soil. So I think that we have to look for a very different sort of economic system pertaining to agriculture. I don't think it works to the benefit of the consumer or the producers.

Now, this is not based on any particular expertise on my part as far as economics is concerned; it is based on a perception of the impact of the present system on primarily producers and also consumers.

DR. ROSS: Bill Ross, Energy Study Group. I have what I think is an embarrassingly simple question. On the one hand it is clear that any use of non-renewable resources is not consistent with a sustainable society, or sustainable economy; on the other hand, to suggest that a conservation strategy would preclude the use of non-renewable resources is manifestly silly. I guess I am looking for some advice above and beyond that in the document provided on criteria for evaluating the suitability of non-renewable resource use in a society that attempts to respond to conservation guidelines.

DR. MUNRO: Well, Bill, I don't think you're going to get that advice from me, because I am certainly not an expert in the field. It was because of the fact that IUCN did not feel that its constituency was one that could effectively address the use of non-renewable resources that it was not included in the strategy, and I think many of the countries that have been developing conservation strategies since that time, as here in Alberta, have included a section on the use of non-renewable resources. I am glad you raised the question, and I expect it will come up for debate as this discussion goes on. I won't attempt to provide any profound guidelines at the moment, thank you.

MR. SURRENDI: I suppose I am going to make an addendum to what the first Ross stated when he asked if you thought that maybe Southern Alberta wouldn't become a desert because of the kind of techniques we are using. I believe that he was very conservative in his point of view; in fact, I would suggest that while we are losing land in the south due to salinity and that sort of thing, we are also losing a considerable amount of what I consider to be reasonably productive land in the North due to poor water management. I suggest there are economists who have forgotten a lot of things over the last 30 or 40 years, and I would like to use an example for illustrative purposes: the Special Areas. I suggest that had those kinds of circumstances existed today, we would probably still have a farmer on every quarter section of land down there, highly subsidized by the provincial government in some way, shape, or form to keep you on that land. I guess what I am suggesting is that I think that your having alluded to the market taking care of certain kinds of problems clearly demonstrates that the market is trying to take care of a problem right now; it appears that we are letting somebody lead us by the nose into the mouth of the dragon. I would suggest also that perhaps some of the desert problems worldwide are not only the result of the people in the areas, that they are endemic to those areas. But perhaps we can look to ourselves and some of the assistance we have loaned them in, I guess, in light of trying to assist them out of their current situation, or situations in times past, that now cause them more problems than perhaps we have solved. Will you make an observation on that?

DR. MUNRO: I think that in certain cases, and one instance has been reported in the press recently, that the attempt to provide, to enhance supplies of water in parts of the Sahel by drilling wells and so on has perhaps been counterproductive, and it has tended to concentrate people and livestock, which effects have consisted mainly of soil deterioration in a much more concentrated way than if those water supplies had not been provided. The same thing applies to the tsetse fly control. This is aimed at eliminating loss of livestock; if you eliminate losses of livestock, livestock populations will increase, and in many cases well beyond the carrying capacity. So I guess this is just another example of what really is at the root of the conservation strategy, and which really should be at the root of all approaches to local conservation and provincial conservation strategies, and that is that the proposal for action must be examined with respect to their implications, not only on the problem at which they are directed, but on all other related situations and phenomena. In other words, we have to take an integrated and broad approach to problems of definition and solution.

DR. SWINNERTON: Guy Swinnerton, Environment Protection Study Group. Dr. Munro, I really don't have a question per se, but I would like you to react to some observations. I think it was interesting that you reminded us of the fact that IUCN started off as IUPN; having said that, I think one can certainly rationalize the reason for that somewhat broader perspective, and certainly that was required within the World Conservation Strategy because of the marketing of it, if you like, to developing countries. However, I think when we use the word "conservation" as opposed to "preservation," we can potentially lead us into some problem areas. As far as I perceive, when we use "conservation," we are really thinking in terms of three components: I think there is a conservation in terms of the wise use of resources, perspectives which are certainly promoted by many resource agencies, and I think of conservation in terms of the quality of the environment, in terms of air and so forth, and then I think there is also conservation in terms of the protection of heritage resources, and I am thinking of both the biophysical and cultural in that sense. I think unless we qualify what we mean by conservation, we can end up in a situation where we don't really attack the problem, because I think if we look at the first two of those categories, we are looking at conservation in terms of modification and adapting traditional resource management practices in agriculture or forestry. When we come to deal with heritage resources, I think we are having to look at certainly the recognition of setting aside specific areas for that purpose, and also the developing of management planning strategies which are specific to those types of resource. I think also, picking up on another point you made, this distinction is significant, because in the first two we basically have the ability to at least identify market prices. Although certainly some market prices are reflected in the economy, in the latter case, that is not necessary, and, certainly, as you have likely alluded to, the problem of identifying non-market prices is particularly critical in terms of our heritage resources. I think that practice has shown us that many agencies, even agencies like Parks Departments, in Canada have quite often neglected their responsibility as far as preservation is concerned by, if you like, using that generic term "conservation" without recognizing those truisms that I have just mentioned. I would like your reaction to that.

DR. MUNRO: I agree. I think that you make a useful distinction. That is a good analysis; it is well to keep in mind. Yes, I agree.

DR. KOSTUCH: Martha Kostuch, Pollution Study Group. You mentioned the Fate of the Earth Conference in your talk, and I would like to take this opportunity for advertisement. This conference is going to be -- Canada is hosting the third Fate of the Earth Conference; it is an international conference, and we will be looking at the interconnection between environment, development, and peace, and we hope to have at least a thousand people in Ottawa immediately following the world conservation workshop in June. We also hope to have a provincial and regional network in Fate of the Earth Conferences leading up to the international Fate of the Earth Conference.

Now for the question: in British Columbia they are in the process of logging on Lyell Island and South Moresby; how do you feel about a conservation strategy being developed where the logging is proceeding at full speed by the government without cultural or environmental concerns of the people?

DR. MUNRO: Lloyd Rushton would be able to talk on the subject of the conservation strategy in British Columbia this afternoon, and I gather I'm going to be asked to do that in his stead, and probably I should do it in that. I don't mind, I will respond now, but that whole topic could be covered quite quickly in a few minutes.

DR. KOSTUCH: We could leave it till then, if you like.

DR. MUNRO: All right, we will talk about that this afternoon.

MS. SANDERSON: Kim Sanderson, ECA staff member. Dr. Munro, one of the things mentioned last night which I would like to pursue had to do with the reputations, if you like, of environmentalists, and I guess this concerns me a little bit. I wonder if you could offer the group any advice, any suggestions, for generally getting people on side with this. I think most of the people in this room are more or less convinced that a conservation strategy is a good idea, but there are a lot of people who look around and think, in Alberta we haven't got a lot of problems; it is just wildlife radicals crying wolf again; we don't need to worry about this. Do you have advice or suggestions for, I guess, raising the profile and convincing people this is a good idea?

DR. MUNRO: I guess one of the key things I was saying is, don't go into any kind of an encounter, whether it is an encounter that is likely to become a confrontation, or whether it is an encounter that you initiate in which you want to try to persuade somebody about the significance of conservation, I would say to approach any such situation with a closed mind -- I don't think the World Conservation Strategy, or the Alberta conservation strategy when it is completed, will be a panacea. I think that its importance will lie in the fact that it will, in the case of the Alberta and in the case of the WCS, represent the distillations of the points of view from a large number of sources, many of which oppose it. You don't get rid of all opposition, but, as you put in your prospectus, controversy and conflict does, if it is managed properly, lead to better understanding and wisdom. So I guess what I'm saying is try to approach people with the view that the objective is to improve things for everybody, that there are -- it depends on the situation; you can point out a certain issue and indicate that perhaps there is a failure in land-use management that is causing a problem, discuss it, discuss the economic aspects, discuss the social implications and so on. Try not just to give a pat sort of an answer to an issue, but always try to explore it thoroughly with the people involved. You won't win them all, but you will probably win more than if you simply rely on rather rigid and perhaps emotional appeals to people.

MR. STOKER: Dan Stoker, Environmental Education Advisory Group. I wonder if we could dispense with some of those old terms, not call ourselves environmentalists and conservationists, because people have set thoughts regarding that. Here is a suggestion, and I guess I ask for your comments: why don't we call ourselves strategists, those who get behind new ideas and don't get lumped into old thoughts? I don't mind being called a strategist; I've been called lots of things. If there is a new idea -- it really is a new idea -- and we're going to try to get industrialists and business people and a lot of people backing it, let's give them a name for themselves that they can accept. Now I don't know if strategists is a bad one to choose, but maybe that's what you were getting at, Kim, is we don't want to get lumped into any old thoughts. Let's progress with something new. I guess I would ask for your comment on that idea.

DR. MUNRO: I think strategists is perhaps a little too generic; I mean, you could be a strategist with respect to almost anything. It refers to a procedure rather than a particular topic; maybe that doesn't matter. I don't know, but it seems that any term is going to offend somebody. Certainly going back to the time when the World Conservation Strategy was being prepared, there was an awful lot of discussion about the term "conservation." Some people equate it with preservation, would never accept that it means anything else, and therefore are prejudiced against the use of the term. There is a problem with environmentalists, you know: in some people's mouths it's a pejorative term and in others' it isn't. I don't know whether you can invent a term that would sort of receive universal support, because as soon as you did, somebody starts using it again in a pejorative way. I don't know whether there is any way out of that. I think the way out really is not to use the label alone, but always try to seek the opportunity to explain what it is you stand for, what it is you are trying to achieve. This goes back to my answer to Kim: you know, try to engage in a constructive dialogue rather than just sort of making simple prescriptive statements.

CHAIRWOMAN SNYDER: Thank you very much. If there are no other questions or comments?

(APPLAUSE)

CHAIRWOMAN SNYDER: I believe that we are to adjourn to the main dining room at about 12 o'clock for lunch.

(LUNCHEON ADJOURNMENT)

CHAIRMAN RICHARDSON: This is always one of my favorite times at these annual meetings, when we have had a good lunch, and then we have an excellent after-lunch speaker. We always give Alistair the privilege of speaking to us on the first luncheon, because by the second luncheon, some of the people leave. So we want to make sure everyone hears what Alistair has to say, because he always has a good message for us, and an enjoyable one. Alistair.

(APPLAUSE)

MR. CRERAR: Thank you very much, Bob. I do hope that the reason that people disappear at the second luncheon is because they have heard everything at the first luncheon.

I would like to take this occasion to comment on Alberta Regulation 234/85. I do so for two reasons: first, because the regulation is an important and consequential change in the administration of the public lands, the Crown lands of this province, and secondly, because it was stated in a November 14th, 1985 press release that these changes "were prompted by the recommendations of the ECA that Alberta's agricultural lands be used to their highest potential."

Regulation 234/85 provides three major new alternatives to the 5,492 grazing leaseholders who lease 5.3 million acres of provincial Crown land in the Eastern Slopes, the Peace River, and the eastern and southern parts of the province. Those figures are from the annual report as of March 31, 1984. Now, to give some idea of scale, under the farm development lease with option to purchase, each leaseholder would normally be able to obtain up to a maximum of six quarters. The potential exposure from the option to purchase could therefore amount to six times the 5,492, or 5.27 million acres, equal to all the grazing leases in the province. Five million acres is a big figure. Presumably, many of these leaseholders could have only two or three quarters, but even if the figure is only 3 or 4 million acres, it is still very large.

This area could, of course, be substantially reduced by the policy stipulation that the option to purchase would not apply to land required for recreation, park, subdivision, forestry, watershed protection, or other conservation purposes. Nor should the land be subject to excessive erosion. However, the agricultural land base study of Alberta Agriculture identifies that 3.5 million acres of rangeland could be broken and cultivated. The area involved, though unknown, is potentially substantial. To establish that the land would not be required for that long list of future uses, in areas where such knowledge is lacking, suggests a potentially large commitment of both people and funding.

Since grazing leases were an important component of the agricultural land base, they were considered by the Agricultural Panel of the ECA at its Public Hearings. We found that grazing leaseholders had a number of legitimate complaints. For example, the cattle cycle is a long-term one, taking up to 12 years to complete. With such long-term planning horizons, there is a need for security of tenure so that range-improvement programs and capital investments can be amortized. At the same time, in certain places, there is a rising pressure for recreational use from hunters, hikers, berry pickers, and bird watchers. There were tales of harassment of stock, gates left open, and ATVs scaring animals and getting stuck in mud holes and having to be pulled out by the leaseholders.

These are legitimate complaints and we try to address them. Our solutions recognize the following facts: one, the problems identified do not apply to all 5,500 leaseholders. Two, those who suffered the most were those whose lease was under the greatest pressure from recreationists, particularly within day-use distance from Calgary and from other major urban centers. In the Peace River or eastern Alberta, the demand for land for recreational use was slight and the pressure for change of use was minimal. Problems were not universal but local. Three, there were legitimate demands for access to grazing leases for recreational purposes.

It was the Panel's view that grazing leases were primarily for the purpose of raising cattle. However, ranching does not require exclusive use of land. If the circumstances under which the lease could be used for recreation without interfering with its prime purpose could be clearly spelled out, it would be possible to achieve multiple use.

These specifications could include such elements as time: before and after cattle are on the land. Or they could include types of use: access on horseback only, or restricted to particular trails. Permission required: where and how permission for access could be obtained. They could also identify the types of assistance that might be provided to the leaseholder, such as assistance in the provision of stock-watering facilities or the ability to utilize enhanced carrying capacity.

These provisions would vary depending on the nature of the operation, its location, its topography, and many other things. Each leaseholder would need an arrangement tailor-made to their situation. but it would only be a small proportion of all leaseholders that would be affected, perhaps 500 out of the 5,500.

In examining other models, we found one that seemed to us to hold promise: timber Management Agreements, though they covered major areas, addressed the same problems. They provided long-term security; they spelled out some clear obligations on the part of the leaseholder in return to equally clear undertakings on the part of the Crown. We therefore suggested a Range Management Agreement, patterned after the Timber Management Agreement, to meet some of the legitimate complaints of the grazing leaseholders. That is Recommendation 26 in our report.

Now the response of the government, by way of Regulation 234/85, is quite different. The government's response was to provide for options for conversion of grazing leases to farm development and homestead lease, with or without option to purchase. A major reason for the new policy is to permit the clearing and breaking of grazing land to provide for crop production, which is identified as a higher use of land.

Grazing leases exist, however, because grass is the best, in most cases, the only use that should be made of that kind of soil. Land is in grazing lease because it was passed up by the original settlers, or abandoned by them, because the soils were too steep, too knobbly, too light, too fragile to be used for anything else. The pioneers of Alberta were reasonably wise old birds; if they bypassed or left an area, it was because there were some real problems with it. Of course we are wiser and smarter today, and we can take crops off land that we couldn't 50 years ago. But we have our limitations. For example, much of the grazing leaseholds are on Brown Soils. The most economical way to manage Brown Soils is on a crop-summerfallow rotation basis, given the arid conditions associated with these soils. There are ways of avoiding the many problems that are associated with a crop-fallow regime: zero tillage, for example, can maintain organic matter, resist wind erosion, and prevent dryland salinization, but only with very high capital costs for equipment.

However, we should not think or act as if growing grass is somehow a less viable or appropriate type of agriculture than grain growing. For much of Alberta, grass and forage crops are the most appropriate use of the land. Of course, there are problems in getting a decent return from growing grass, but the solution is not to switch from grass to grain, with the potential to create severe soil degradation problems, but to make the growing of grass rewarding. That was the approach that the Panel took, and that was the reason for Recommendation 15 to remove restrictions to beef marketing, for Recommendation 16 to increase export marketing of grass and forage products, and particularly Recommendation 21 for research into ways to increase yields of grass and forages, which have been lagging seriously in comparison to increases in grain yields. Since 1959, we have had spectacular increases in yields in grains and oilseeds. We have had very, very fast growth in these yields.

Most of the land under grazing leases is best suited to growing grass. We do it well, and we can do it better. It is not "intensifying" the use of the agricultural land base to bring an additional low productivity, high cost -- high cost in terms of inputs and management -- land for the growth of crops. The high and rising cost of agriculture inputs in the face of stable or declining prices is widely identified as a major problem facing the agricultural industry. The Panel were of the opinion that an important contributing cause of rising input costs is the need to compensate for the declining productivity of our soils. By keeping land in grass, we can both maintain a supply of low-cost forage and maintain or help reverse the degradation of our soils, thus doubly maintaining Alberta's resource advantage in increasingly competitive world markets.

The discussion to this point has focused on farm development leases without an option to purchase. When we are talking about intensifying the use of land, except for the Green Area where it is the only option permitted, this is not likely to be the preferred option for grazing leaseholders. The farm development sale and the farm development lease with option to purchase look much more attractive; that is supposing that funds are available to the leaseholder after two or three years of drought, grasshoppers, and poor markets.

The difference between these two options is that the farm development sale requires all the money up front, while the lease with option to purchase requires 10 percent down, with a maximum term of 25 years at 8 percent interest. In either case, the land is available to anyone who has held a grazing lease for five years, with the land available at the appraised unimproved value.

Unimproved values are equivalent to agricultural productivity values and are usually below the market value. In many parts of the province, distant from urban centers and competing land-use demands, where unimproved values and market values are similar, the option to purchase makes little practical difference.

However, in the parts of the province where demand for non-agricultural properties and uses are high, the placement in private hands of six quarters per leasehold creates a substantial temptation.

It should be noted that there is a covenant that Crown land obtained in this manner shall not be resold for three years, except with the Minister's permission. But after three years, the land becomes freehold without restriction. The following options would therefore become available: one, the sale of a quarter section for recreational or residential purposes. The prevalence of this practice would depend on the spread between unimproved value, that is, the price from the Crown, and the market value of the property.

Two, either farmstead separation or the first parcel out provision, which most subdivision-approving authorities grant without question.

Three, beyond that are the land-use and subdivision controls exercised by local municipalities, regional planning boards, and the Provincial Planning Board. The way most land use and subdivision bylaws are written, the lower the CLI rating, the easier it is to obtain subdivision approval. Most land in grazing leases will have low CLI ratings, i.e. CLI 5 or 6, and therefore they have an easier job of getting subdivision approval.

There is, therefore, a real temptation when the land is in freehold to sell off a quarter or subdivide it to provide a little cash to carry on the ranch. However, though the introduction of country residential properties can lead to some disruption in predominantly grain-farming areas, the mixture of urban people and cattle has an even higher potential for conflict. It may be that the initial sale would be to people used to the ways of cattle, but the resales would be to urban people, with urban children, urban pets, and an urban appreciation of the tort of negligence.

In addition are the concerns of the hunters and recreationists for access and use of freehold land. It may seem that the sale of Crown land is a solution to the difficult problem of access to grazing leases, since it becomes the responsibility of the owner. However, like most things in our society, if it doesn't seem fair to the majority, legal prohibitions won't be effective. If too many opportunities of access are closed down, it will break out in some other form, for example, in greater use of unopened road allowances. We have a reasonable balance, a reasonable accommodation at present. Of course, it can and should be improved. However, what we need are solutions tailored to specific individual problems, not blanket solutions that are too large, or too small, but rarely just right, like the uniform they give you when you go into the army or the navy, or whatever.

So, underlying the Panel's Recommendations for Range Management Agreements were the following objectives:

a) That the best future use for good grassland soil is as grassland, not as problem cropland.
b) That agricultural land should be protected against future segmentation, the intrusion of incompatible uses, and from landholders whose major interest is not agriculture.
c) That multiple use is better than exclusive use, that education and co-operation are better than compulsion and confrontation.

Regulation 234/85 does not move toward these objectives; indeed, as I have indicated, it moves in the contrary direction.

These are the kinds of comments that would have been expressed if the procedure announced by Keith Alexander, three days before Regulation 234/85 was passed, had been followed. Incidentally, I would like to thank Chairperson Sheri Dalton and the Co-ordinating Committee for pointing this out. Mr. Alexander's procedure allowed for the circulation of new regulations in the form of a "discussion draft" to "provide the same type of public exposure for proposed regulations that is now provided for proposed statutes." Is it too late to follow Keith Alexander's direction? I don't think so. If there ever was a regulation that deserved the kind of public discussion that was envisaged by the Deregulation Commission, it is this one. I don't believe any grazing leases have yet been sold; the application form is still being drafted. So why don't we consider this regulation a "discussion draft" and permit an opportunity to consider all the concerns that have been voiced. I would urge the new member for Edmonton-Whitemud to follow in the path of his distinguished predecessor and propose the circulation of this "discussion draft" to "potentially interested organizations."

Thank you very much.

(APPLAUSE)

CHAIRMAN RICHARDSON: Thank you very much, Alistair, for your words. I'm sure it is something that I hope Mr. Sparrow will hear and take heed from, because it is an excellent one. Are there any questions for Alistair? I'm sure you would be prepared to answer any that are brought up.

DR. KOSTUCH: Alistair, you mentioned that the farm development lease option is the only option available in the Green Area; I presume you are saying your understanding is the land could not be sold then, or the option to purchase could not be gotten, and my understanding is not the same. That land, although Sparrow has come out and said he didn't have any intention of selling that land, it could occur. In fact, I think that the invitations went out to all 500-plus farmers to change to a farm development lease or take the option to purchase.

MR. CRERAR: My reading of the regulation indicated to me that the farm development nor the option to purchase is not available to land in the Green Zone which is not under grazing leases, they are grazing permits and grazing licenses, and there are 234,000 acres of those.

MS. POSEY: Maryhelen Posey. If you read the regulation very tightly, you will notice a little tiny section points out grazing permits may be altered to grazing leases, which five years later would permit that option.

MR. CRERAR: That may be so; I didn't read it that tightly. My reading of it is that it doesn't apply in the Green Zone; I could be wrong, but I didn't get that impression from reading it. I mean, we are already talking about 5.3 million acres in a strategic location in the White and Yellow Zone. You know, the Green Zone starts and it goes into the White Zone, and then it goes into the areas that are actually settled. It's a transition zone, a very big transition zone.

MR. PASCHEN: I want to point out that in the last ten years or so the grazing lease permits were available to the general public, particularly to farmers who had already homes established. It was not sufficient foresight from the government's perspective to get grazing permit holders not necessarily in the immediate vicinity; they were sometimes 12 or 14 miles away. What I am saying now, we want to have farms stretching over long distances, my foresight, what I see in my own mind, is that if we give the first option to the individuals being adjacent to the Crown land as having recognized those so that ultimately we are looking at fuel conservation, we are looking at the whole overall perspective; we would have much more better management. Right now, it is a hodgepodge; land has to be resold in order to make a worthwhile private enterprise out of it. So I'm looking into the future: are there any other kind of grazing lease permits on the drawing board at this stage; I think that is the way it ought to be looked at. Thank you.

MR. CRERAR: I think the important thing, Gerry, as far as I'm concerned, is that we should try and keep in grass those places where grass makes the greatest sense. Private, public, that really doesn't matter too much, but since we have this land in grazing lease in Crown land, the simplest way to utilize it, and to utilize it in the best way for that land, is to keep it in grass.

MR. SURRENDI: Has anybody got any idea who has done a cost-benefit analysis on this stuff? We have heard from you, Alistair, regarding the immense number of the increase in cattle production and that sort of thing that is going to go along with this sort of sale, but I still don't understand where we are going to sell it, and how we are going to sell it for more than it costs us to grow it, because we can't sell what we have now for more than it costs us to grow it.

MR. CRERAR: That is exactly the approach we took as a panel. We said that the major problem is not growing things, it is growing things cheaply, and we should concentrate on land -- you know, I heard from Bill McGill, who is the head of Soil Sciences at the U of A, that 43 percent of the farms in Alberta showed an increase in the amount of organic matter in their soil between two testings that were about five, six, seven years apart. That means that those 43 percent of the farms in Alberta are improving their quality. They are improving their quality, and if you look at those same 43 percent of the farms, you will find that they are the ones that year in and year out, some bad years, some good years, but they make a viable farm operation, a viable farm income, and they compete against the subsidized products of the EEC and the U.S.A. We can do it in this province; we can do it on those 43 percent. There is another 40 percent or 30 percent where in fact the quality of the soil keeps going down year by year. You measure it five years after your initial measurement, and the organic matter, which is a good sort of sum of all the problems with soil, has gone down. Okay, many of those kinds of soils should in fact be in grass, and they shouldn't be trying to grow grains and oilseeds where, for one reason or another, they are not going to get a good yield, where it is going to cost them a great deal in terms of input and fertilizer and herbicide in order to achieve those yields. You know, you put a hundred dollars worth of stuff on one thing and you get back $101. You put a hundred dollars of stuff on another piece of soil in another location, and you get back $175; obviously the one that is bringing that high productivity is the one we should protect, intensify, and try and build on that strength -- not build on weakness, build on strength. But there is a strength in poor soils in Alberta, and that is to grow grass; that is to grow forage. You not only mend the soil, you not only improve the soil, but you can do it well. Then you have to market it through the cow. Unfortunately, we have had all these programs which have built up our competitors in British Columbia -- you know, that they shouldn't be able to feed themselves because they don't have the basic land base.

MR. SUMANIK: Alistair, I'm sorry to interrupt. We eat moose.

MR. CRERAR: If you eat moose you are doing fine, but if you eat cows, it is probably costing the government about half the cost of that cow to bring it to a table in British Columbia. And you look at Ontario, you look at Quebec, and you see that they are in fact providing subsidies, artificial crops, to put their own products on the market at great cost. We could give them a better product at a lower cost. They are talking about that now; they are talking about getting access to that kind of market. Well, that is the thing that really is critical, to find some way of using what we can do well: growing grass, growing hay, growing forage of various kinds that will improve our land and bring us a return. Sorry to get a little impassioned.

(APPLAUSE)

CHAIRMAN RICHARDSON: Thank you again, Alistair, for your comments; it was certainly a well thought-out speech, and it should be giving Mr. Sparrow some thought as a result of that, pointing out to him where he only interprets the Agricultural Land Panel recommendations where it suits him and not where they actually were.

It is now about 12 minutes after 1:00, so could we reconvene downstairs by 1:30. I would like to start at 1:30, so if you go down as soon as you can.

(RESOLUTIONS published under separate cover. They are available from the ECA Library.)

CHAIRMAN RICHARDSON: Ladies and gentlemen, due to the efficiency of our previous chairman who was up here, and the well-written resolutions, they went through much faster than we had anticipated, so let us take the half hour break now. We will see if we can get the coffee down here. If we can't immediately, let us come back at 2:30 and we'll commence the next program at 2:30.

(REFRESHMENT BREAK)

CHAIRMAN RICHARDSON: Just before we start, a couple of housekeeping items: one, as you know, tonight is a free evening, except for the workshop facilitators who have a dinner in the dining room. There will be films shown, *Land, A Question of Values*, which Ken Nelson has arranged for us, and it will be shown in this room, I believe. Ken, would you like to speak to it?

MR. NELSON: Yes, Mr. Chairman. I also want to mention that I have a copy of a videotape of the Environment Council's presentation that will be made at the meeting leading up to the recycling hearings, and I will be showing that as well. This is the first time it will be displayed to the public; it is called *One Man's Garbage, Another Man's Gold.* It is going to be set up here to go around 8 o'clock; that should give you time to get back.

CHAIRMAN RICHARDSON: One other thing, lunch tomorrow again will be upstairs, but they promised that it will be served tomorrow. It was supposed to have been served today as well, but there was a misunderstanding. They say it will be served tomorrow, so you won't have to get in that long lineup.

I guess we are all ready to go ahead now with the next session on the Provincial Perspectives, and I will turn it over to Elmer Kure, who is the chairman for this session.

CHAIRMAN KURE: Thank you, Bob. As your program indicates, this session is on perspectives, and just a moment to draw your attention to focus on the way the Program Committee have laid it out. In consultation with the Steering Committee, the Program Committee had a number of meetings in an attempt to plan this whole weekend's events in such a way that the provincial conservation strategy prospectus, which is now in the blue draft form, could be brought to you in a fashion that you would not only understand the energy and effort of the last year, of the number of people and various public advisory committees going through three drafts to reach this stage, but secondly, to point out to you that it is a prospectus, it is a philosophy, and don't expect it to be a working document. So the attempt now, during this session, is to bring three eminent speakers to you who have perspectives from their experience and their expertise.

I believe the natural progression of this weekend, then, is to get some of the, maybe, hang-ups out of our system by hearing others, by voicing our own opinions, but at the same time leading up to the workshops tomorrow where you will actually be able to see yourselves working in a field of your choice in a drafting of a working document for the Province of Alberta. So I guess look at the objective sheets that were enclosed in your kits; you will be able to rationalize that better, as you have time, from the perspectives we are going to give.

Now, without any further talk, I would like to introduce, first, David Kafton of Berkeley, California, he is the Executive Director of the National Council on Gene Resources. Last night -- we are not talking about overalls here, we are talking about all those little bugs that say whether you are good-looking or bad-looking, or have a long tail or a long neck or something -- genes. The National Council that David is on is a private, non-profit organization dedicated to the furthering of conservation in the way we use animals, plants, and micro-organisms important to society.

Briefly, today he will speak to the conservation of genetic resources and its relationship to the development and implementation of the conservation strategy for Alberta. So, David, I would like to call on you to give us a perspective that, while it may be not appropriate for a working document later, I think it has the elements that you need to look at in this philosophy that we are talking about. David.

(APPLAUSE)

DR. KAFTON: I want to thank you very much for the opportunity to share our concerns with you about genetic diversity, and, more specifically, genetic resources. I think your intentions to create a conservation strategy for Alberta, and the process for doing so, are critically important to your future. I think this will help prevent serious problems from occurring in the first place. I think it will minimize the impact of other types of problems and provide you the most cost-effective way of bringing about sustainable development.

I also think that the existence of your unique -- and I have been asking a lot of people about you – your unique Alberta Environment Council and the Advisory Committees is very exciting; it has done a lot and it has tremendous potential, especially through this conservation strategy. I am sorry to report that California has neither a conservation strategy nor a council. Consequently, I think that many of our programs are and will continue to be, until we have such a strategy in place, characterized by the never-ending woes of poor funding, inadequate legislation and policies, lack of co-ordination, conflicts galore, poor organization and planning, insufficient personnel and resources, and, most important of all, losses of living resources, most of which goes unmonitored and unreported, so we don't even know what is going on out there. That is one of the major problems in itself.

This does not imply that California does not have many dedicated conservationists within the public and private sectors; rather, we have not developed and co-ordinated a long-term strategy for effective collaborative process for addressing the development and conservation issues. As stated earlier, the United States federal government, to other people's knowledge and mine as well, does not have a national conservation strategy. We do have a U.S. Council on Environmental Quality that reports directly to the president. It is not formulated as you are, but it was very prominent during the Carter administration, and has disappeared somewhere, to where I don't know, during the current administration.

I am here today because Robert Prescott-Allan could not be here. I am sorry he can't be here; I am glad that I am here. He and Christine, his wife and partner, reside in Victoria. Robert is on a worldwide tour of visiting different countries to see how they are doing in terms of adopting conservation strategies. It is being sponsored by the IUCN. Robert is largely responsible, has a large part in putting together the World Conservation Strategy. A lot of it is his writing, and he and his Christine recently completed a study for Parks Canada that examined the conservation of genetic resources in national parks and reserves, trying to answer the basic question: what is inside and what is outside the national parks and reserves, because something as basic as that has never been answered.

You will hear me say things like that a lot, basic answers like that, basic information. It is going to be very hard to get more support. I would like to talk a little bit about the National Council which I represent. We provide information and assistance on the conservation and wise use of genetic resources. We have concentrated on activities which lead to long-term institutional change and increased support for genetic resources. We work with scientists, elected officials, government agencies, corporations, and conservation organizations that share our interest in agriculture, forestries, fisheries, and other living resources.

In this regard we have been experimenting with the development of a collaborative planning process used to bring the various interest groups together to identify needs in a systematic way, and to develop a co-ordinated method to meet them. So it is similar to your Council, except you have a much broader mandate, which I think is actually the proper one, to look at all of the issues of development and conservation issues that are related to that. We also have the opportunity to examine organizational options for the Government of California in its management and conservation of genetic resources.

My talk will be in four parts: first is to talk a little bit about the technical aspects of genetic diversity and genetic resources so we are on a common ground. Second, I would like to briefly go over current programs at the national Canadian level. Third, I would like to talk about how this fits in with the conservation strategy, and, lastly, I would like to talk about some of the options or questions that need to be addressed in implementing your conservation strategy. I don't think you're going to have too difficult a time putting together a strategy per se; it is really carrying it out and developing a process which is the most difficult part.

So let us start with genes. I use that term to describe the chemical pieces of information that are passed on from generation to generation. And the characteristics of living things, from what we are talking about, is the result of two types of interactions: one is the genetic composition of the organisms and the environment that it is exposed to. So if you talk about a group of organisms, species with a certain genetic composition, and their environment, whatever you say, whatever results, is because of that interaction. For example, if you're interested in surviving to reproduce, like through evolution and so forth, a given set of organisms has to be able to withstand whatever environment they are exposed to up to the time of reproduction, and they have got to have the genetic composition to meet that. When we are talking about uses of organisms in agriculture or forestry or fisheries, we place greater demand than just simple reproduction and survival as a species. We want to see the trees grow tall and straight, and we want to see the corn grow real fast, and so forth and so on. And genes have a lot to do with that. We manipulate the environment and the genes so that we get the exact results or, hopefully, the results that we all want.

Now, genetic diversity refers to the differences in genetic compositions among a group of, it could be DNA molecules, it could be genes themselves, chromosomes, individuals, populations, that is, a group of organisms that are related genetically so that differences within a population and between them, and then we have a species, and finally animal and plant community groups, groups of different species living together. We can talk about the genetic diversity of all these different levels.

Now, there are two types of genetic diversity that we need: one is in order to survive today's conditions that we know about; we also need genetic diversity to be able to meet society's needs, and environment's new conditions. Some can be foreseen, and most cannot. There is one constant that I know about in nature: it is change, and so we need to allow, to have, the capability of having the genetic compositions at all different levels change.

Now, the purpose of conservation, as I see this, is to preserve the genetic diversity that is needed by society, and gene or genetic resources are the genes and their combinations that are needed by society. The problem right now is, it is very difficult to determine, to distinguish, between useful and useless genetic diversity. You can say ah, this is genetic resources; that you don't have to worry about. We can look back in history and we know that the species that we see today are just a small fraction of those that have occurred in the past, and have gone extinct and made room for new species. This happened way before we came around, so it is a very natural sort of thing. But that is one of the problems that we have to face.

Genetic resources include domesticated crops and livestock, wild relatives of these domesticated organisms, what we call primitive remnants of plants, and the native places where the wild relatives of our crops and livestock, current livestock, occur: timber trees, commercial fisheries, micro-organisms, synthetic DNA, plant and animal organisms used for pharmaceuticals -- there is a nice description of a lot of this in your prospectus -- and, of course, species that have a potential to society. There are two basic ways to conserve these living things: one is called the in situ method, that is, to try to conserve the organisms in the natural environment. And we can look at all the different levels of genetic organization and ask ourselves, what is the most appropriate way?

The other way, of course, is the ex situ method, like a seed storage facility, or a clonal repository for fruit and nut trees, where you take a piece of a fruit tree, a plum tree, and you have got the genetically identical piece of tissue and you can store it and grow the whole tree. So we can ask ourselves what is the most appropriate means. The only way you can conserve a population, or populations, is in situ, because the viability of the population is based not just on individuals but their relationship to other organisms and how they occur in the environment. The same goes for an animal/plant community: you can't store that in an icebox, but you can store individuals. If you have an interest in storing a particular individual, or particular gene, or combination of genes, that's a possibility. Where we can't do it – like it is very difficult to freeze tropical seeds, seeds from tropical plants -- you are forced to grow the whole organism if you want to store it. And if you don't have facilities for doing that, then the best thing to do is keep it going in the wild, that is, if you are just interested in the individual.

Okay, what about current programs? Livestock, there isn't much to say about that. We really don't have any; we don't have any national programs. I'm not aware of one in Canada. The FAO, the Food and Agriculture Organization of the United Nations, has put out a lot of studies and books, but there is no gene bank. You can't conserve domesticated animals and plants in nature, they are domesticated; they are dependent upon you to keep them going.

So we need some sort of banking system, but we don't have that for livestock. There are some efforts in England that I'm aware of, some organizations attempting to get something going, but there isn't any real viable government program.

Crops, that is where a lot of activity is going on. For example, in Canada you have got the Office of Plant Gene Resources of Canada in Ottawa, and if you're interested, I can give you the address afterwards. They put out a quarterly newsletter headed by Gilles Rousselle. The United States has got the National Plant Germplasm System. There is a new journal that was put out; it is called *Diversity,* and it is dedicated to covering the diversity issue dealing with crops worldwide. The National Plant Germplasm System has a national seed storage lab in Fort Collins, Colorado; it supports some collection work. The Fort Collins facility uses a seed bank, and it has some clonal repositories. Many feel that it is under-funded and has a lot more to do.

The international group that is most prominent is called the International Board for Plant Genetic Resources, headquartered in Rome, and it is part of a larger group called the Consultative Group for International Agricultural Research. The budget of this Board is 4 to $5 million a year, which it spends mostly on collections of seeds and clonal materials. Right now there is a significant conflict going on between the developing world, the Third World, and the developed world, over control over crop genetic resources. When you develop an Alberta conservation strategy, you talk about future agriculture in the state, and you immediately get into the international realm and the national realm, because you are going to be concerned about species that occur in the Third World. You're going to become concerned with what kind of policies, what can we do as Albertans about that sort of thing. That is what we have been asking in California, what can we do about a lot of relatives of corn and barley and so forth over there. What is happening is that the Third World supplies the raw material, the wild relatives, the seed wild relatives, for example, the land waste material. Of course the seed companies in the developed world take this material and develop it into commercial varieties and patent it. Then they sell it back to the Third World, and they are saying, hey, we give you stuff for free, and we wind up paying for it. And the developed world says, we have invested in all this, we have got to get a fair return on it, and so there is a conflict. Helping relieve that conflict is a Canadian by the name of Pat Mooney, who is in Manitoba, and he is part of a group called the International Genetic Resources Program, which is headquartered in North Carolina, or South Carolina, and they put out a report. What has taken place in Rome, where the FAO has its headquarters, is that the FAO has declared that it shall take over the International Seed Network, the genetic resources network, from the International Board for Plant Genetic Resources. Now, the International Board has said no so far. The Board gets its funding from the CGIAR group, which is funded by the developed countries to the tune of $200 million a year for international agricultural research centers, such as the wheat research center in Mexico City where (inaudible) developed his pre-evolution wheat varieties. The FAO were going to take it over, and so now you have about 80 countries going along with the FAO -- Mexico and many of the Central and South American nations, Spain, many African nations, and so it will be interesting to see how it resolves itself.

In forestry, the emphasis is on in situ conservation. I might add that very few, if any, parks and reserves are set up for the purposes of preserving gene pools, or if they have, they are not managed in that fashion; there are no gene banks that I know of in forestry. As far as

Canada is concerned, the Canadian National Forest Service has an interest in this; in fact, some of you may know Kit Jaegen (phonetics), who is headquartered in Ottawa. He is one of the representatives on the expert panel of Forest Genetic Resources that the FAO has in Rome. It turns out that British Columbia, and I hope I'm not saying something out of turn, has adopted a policy for forest genetic resource conservation, and a program is supposed to follow.

Most of the effort in forestry is through attempting to harvest and restock correctly. The adequacy of that is much in question.

In fisheries, there has been little work -- lots of research, but little conservation work, and I don't think I will talk much more about that. Those of you who have specific questions, I will be glad to answer them during the question period or afterwards.

I won't mention much about endangered species work, other than to say that the laws, at least in the States, in California, for endangered species are in my opinion, quite weak, particularly for plants. We do have good programs in gathering information on endangered species. That is the work of the Nature Conservancy, and typically their program in each state on collecting data relating to endangered species gets picked up by the government of the state, so it is a state program, but we have that in California. So we have information on them. We don't have the funds and the wherewithal to do much about them. Like we have one lady who's charged with all endangered plants for the State of California, and she just can't do it all.

You will find, most of you have already found, and some of you will find that preserving genetic diversity is one of the three main objectives of the World Conservation Strategy, and one of the six of your provincial strategy. I believe it's maybe a mistake to call it just a conservation strategy; I think we should be calling it a development and conservation strategy. I think in your writing it is quite clear that it is called sustainable development. It doesn't talk much about it, but it spells out the framework for getting the plan. But nevertheless it's all about development, sustainable development, which can't take place without proper conservation. I don't think we're going to be successful just stressing conservation.

You may ask yourself, as I have many times, if genetic diversity, genetic resources, species are so important -- let us just focus even on the economically important one -- how come support is so little? I have my own set of obstacles; these are obstacles in the World Conservation Strategy and the prospectus, I believe, at least the yellow draft that I read, and mine are similar. Number one on my list is the perception that conservation means short-term costs and perhaps long-term benefits, and the way I translate that in terms of reality is that it is very difficult to expect industry to invest in activities where the payoff is far into the future. We really need to look to government with industry political support where we can find mechanisms for some sort of partnerships. We are faced with that reality, and it is not necessarily a false perception.

Two, lack of information on specific technical and policy needs: you can get people to agree that this is a motherhood issue, that conservation is so important, but when I am asked what exactly needs to be done, and how much will it cost, and where is your proposal, I don't have it, because I don't know exactly. Information is lacking; it hasn't been put together satisfactorily enough, at least that is my perception. Once you have it, you have to make people aware of it. I think that is one of the great things about a Council like yourself, because you can get that information together; once you have it, it can be a valuable and successful tool to successful action.

And the fourth one is inadequate political and financial arrangement. What I mean by that is there is an opportunity, and you obviously have taken a lot of those opportunities, of getting together diverse interest groups and exploring issues, and you will come up with a unique mechanism. This is a unique mechanism that you have here, and other places can find them too. When you develop a process for your conservation strategy, that may very well be unique, too. Given these obstacles, the other things sort of follow. You have all mentioned them previously: the absence of policy making, the lack of funding, and et cetera, et cetera.

Now, as you can see, the obstacles aren't technical. If we had the will of the policy makers and had the resources, we could go out and we could work with the knowledge that we have right today. So that is one thing.

I think that a conservation strategy will help overcome these obstacles that I have mentioned, so it is very valuable in that regard. I just want to mention one other thing about a provincial conservation strategy, and that is that it is really important. Some people might say, you're going to have a national one, perhaps in Canada, there is a world one, why do you need one here? As I've already mentioned, when you talk about agriculture, you are talking about what happens in other places. Or if you have a particular species -- you grow your wheat in Alberta, and your cattle and so forth. You have your crops that are in common with other provinces, but you have your own unique environmental factors and your own unique problems, and when they take a vote across Canada to make a collection or to evaluate germplasms, you may not be using your wheat. You may not be doing it yourself; that is why California started its own independent genetic resources program, because we have unique needs. There are three very important questions that need answers, and then I'll end this talk. One is, what process or method is going to be used to develop specific plans based on the Alberta Conservation Strategy? As I said, I think developing the strategy in a document similar to the World Conservation Strategy is not going to be all that difficult; for instance, when you get down to specifics, coming up with these long-term specific plans. The second question: who should ultimately have the responsibility for making the plans based on the Alberta Conservation Strategy, who is going to do it, who is going to have the responsibility? Not putting together the strategy, but the plans. And who should have that responsibility for carrying these plans out? You have many ministries involved; what about the private sector?

So, I wish you every success, and I thank you for the opportunity to speak with you today.

(APPLAUSE)

CHAIRMAN KURE: Let us have just a few minutes for specific questions to David while he is at the mike, on the diversity of genetics. Any questions specifically at this time? We will have a little time after the other two speakers as well for general questions, but if you have any specifics now, it would be a good time, and use the mike down there.

Our second speaker is Ken Sumanik. Ken is from Nelson, British Columbia; he is a wildlife habitat biologist. He has worked with the British Columbia Government. I guess the first time I met Ken -- I have known him for 10 or 12 years -- was out in the Kootenays, and we were in fact looking at a process that had spread from Oregon to British Columbia called Co-ordinated Resource Management. We made a tour out there on a couple of occasions, and Ken was one of the people who really told us how it was and showed us the hands-on approach to land-use planning, where in fact they had the next thing to a shooting war between cattlemen, foresters, hunters, and so on. So he comes from that experience and will give us that perspective, I think, of how you might develop land-use plans, and how we can build a conservation strategy into those plans. Ken is now an Ecology Consultant for Fisheries and Wildlife, and particularly connected with southern British Columbia. So, Ken, we will have your practical experience right now.

(APPLAUSE)

MR. SUMANIK: Thank you, Elmer. Mr. Chairman, ladies and gentlemen, after listening to Alistair's remarks at lunch, I think you are going to have a shooting war on your hands on the Eastern Slopes; it is going to make the one we had pale into insignificance. If you need somebody to handle a Howitzer, I am available.

Thank you for the opportunity to speak about conservation and the conservation strategy; it is a topic which should be debated by everybody, all mankind, really. I wish to state categorically that British Columbia does not have a conservation strategy. This fact is so well-concealed that no one understands it or knows it exists. So we in British Columbia differ from the other provinces, and I hope that we do something about that very soon.

However, we do have examples of very simple, almost crude conservation strategies that do work in the Province of British Columbia; we also have a lot of simple conservation strategies that failed miserably. What I would like to do is, I would like to give you examples of two different kinds of strategies: one that works, the reasons why I think it works, and several that don't work, and why they don't work, and I think we can draw our own conclusions. But having said that, I think we should examine the word "strategy." According to Mr. Webster, strategy is the science and art of employing, it could be political, economic, psychological, or military force, to a nation or group of nations to afford the maximum support to adopt policies in peace or war. It is really a broad term. It is also the art of devising or employing plans or strategems toward a goal. Strategists, therefore, are those who devise strategies or plans, whether they are bank robbers or whether they are city planners, and they deal with concepts; we call them planners or masterminds. Tactics, on the other hand, are devices for accomplishing ends; they are the mechanics of doing or making a plan work. Tacticians, therefore, are those who make something work, or create something, or synthesize something, and they are invariably doers. I think it is fair to say, at least speaking from British Columbia now -- I wouldn't dare suggest for a moment that Alberta and British Columbia have any similarities -- in British Columbia we have a plethora of planners and a dearth of doers.

So a conservation strategy for any province, or any planet for that matter, in its basic form must be a plan which outlines how human populations are going to coexist with plants and animal populations, and you can look, no matter how you look at it, it comes down to that simple fact. This is an extremely complex task, because of the things David mentioned this morning -- social, cultural complexity, and so on. But complex as it is, it still has to be addressed by all of us.

As a wildlife biologist working in British Columbia for a time, and to some extent southern British Columbia for not so long a time, I spent a lot of time and effort assessing and caring for ecosystems, including wild ungulates and their prey species. Our objectives were simple: we were trying to keep their population in some kind of balance -- really an objective that is impossible to pursue, but we were trying to keep these populations in some sort of balance to each other to the best of our ability under the most arduous circumstances. Occasionally I reflect on those circumstances and interpose human beings instead of moose or wolves. I think about human beings in the same situation, and the fun of balancing human beings with ecosystems was just wild. I speculated wildly on these things, and often wondered how we would go about doing it.

But that is essentially what we are going to have to address, whether we like it or not. It's an Orwellian view, but we can't avoid it, and the end result is obvious. We are reminded of this daily by the media, you know, human populations in distant places where these populations have exceeded the limits of ecosystems to support them. We responded typically by supporting these populations with food, shelter, and, to a lesser extent, clothing, to the best of our ability. It is your basic no-frills biological budget, and that is the bottom line.

At this point, I would like to give you an example of a conservation strategy that we feel is relevant, and that I think we are really very proud of in British Columbia. It is a program that we put into effect over ten years ago that is still in place today, so that says a lot for it. In the east Kootenays, Elmer mentioned that we did have a shooting war on our hands. We had foresters, wildlife people, range people, professionals, the users literally battling in the media and battling obsessions and meeting continuously; it was a terrible situation. Something had to be done; each group blamed the other. But essentially the main concern was that each group was ignoring the other, and ignoring the other's concerns. I think this was the principal reason we had to finally climb into the same bus together and try to solve our problems. The Crown forests and grasslands which support most wild and domestic ungulates were being grazed without concern for wildlife; that was the spark that got this whole thing going. Wild ungulate populations declined in response to overgrazing and overharvesting, and I stress that. But in 1971, elk populations, for example, in the east Kootenays decreased to approximately 5,000 animals. They were on the edge of becoming an endangered species; when you have 30 to 40,000, 5,000 is a real small number.

This prompted wildlife managers to institute a supplemental feeding program for elk on the more accessible winter ranges, which is again a situation that many, many wildlife managers find themselves in today. Something had to be done to rectify this deplorable situation, and the users and managers knew that the old ways of doing business weren't going to correct the problems. In fact, the old ways of doing business had got us into the mess in the first place, so they knew that something had to be done and it had to change.

How to change without creating further chaos became a major concern. During the annual meeting of the British Columbia Wildlife Federation in 1975 in Nanaimo, a wildlife biologist by the name of Richard Schersinger (phonetic) had been invited to speak to the members of the British Columbia Wildlife Federation of a problem and the solution which was brewing in eastern Oregon. He made an impressive presentation and after the presentation invited anybody, anybody at large, to go down to Birch Creek to see firsthand this program that they had in effect. So, we were so desperate that a whole gang of us went down -- ranchers, loggers, hunters, trappers. I tell you it took us two weeks to get enough government vehicles and out-of-province travel forms to go down there, but we went down there.

When we got down there, we had a firsthand look at a fantastic program. Range conditions had improved markedly. The native bunch grasses were evident where seed grasses had flourished. Elk populations had increased as well. We were impressed, to the point where we wanted to get at it right away. We wanted to start the same thing in British Columbia as they had done in eastern Oregon, but we couldn't, because we didn't have a program that would allow us to get together in a rational, sensible way to do this sort of thing. So these people in Oregon, being generous as they always are, they invited us back for a workshop, and they had put together all the material that was required to give us a workshop to put together a plan, a strategy.

So, six weeks later, we all got our out-of-province travel, loaded up some vehicles and some of the same people, and we went back to Oregon, where we learned firsthand how to do what these people were doing. We picked up our trucks and headed back over there and started our first plan, in 1979; it was in July. But once we got started, well, other things had to happen as well -- bureaucrats wondering what is going on here, the usual stuff. You get tired of it, but nevertheless it is still going on. So we suggested a task group -- this is important -- a task group be formed, a task group headed up of senior management staff from all the key agencies: land, forest, environment, water resources, agriculture, so that these people would understand what was going on. The purpose of the task group was to ensure that members of the planning groups actually did know what they were supposed to do, and so that we could in fact do our duties. This was an important breakthrough, the task group and the planning group, and the purpose of the task group was to make sure that the planning group worked. Well, it worked; funnily enough, it worked.

In addition to the professionals on the task group, and certainly the planning group, we had users; we had foresters, loggers, ranchers. Believe it or not, we had people on the planning group who were actual doers, so that for the first time in the province's history, we had thinkers and doers being one and the same, and I think this was instrumental in making the program work. It didn't have somebody sending you a great big package saying here, interpret it to the best of your ability and good luck. We had the actual thinkers and doers being one and the same, and this was absolutely instrumental in making a conservation strategy work. I think we all agree to this.

At the completion of the co-ordinated resource management plan, all the members of the planning group endorse it in their handwriting. I have a copy of the plan in my briefcase, and I would be glad to show anybody what it looks like. Logging, prescribed burning, and grazing are all co-ordinated pasture by pasture, or land unit by land unit. Each plan is reviewed during the winter to evaluate the progress, or the performance of all of the users and doers; this is very, very important, because what it does is it serves to develop accountability and credibility. It reinforces the understanding within your group, and also identifies the problems which need rectification. It is a very important process; it is something that is continuous.

So the key to success in this case is joint decision making, interagency co-operation, and user participation. You have to have competence as well. It is like trying to put together a football team: if you have got a good coach and a good playing field and you have got all the facilities and everything in place, and all you have got to draw on are 140-pound weaklings, you are not going to put together a football team. You have to have competent players, so you have got to keep that in mind.

Problems do arise occasionally, but they are nipped in the bud or usually dealt with by the task group. That is the main purpose of the task group. This simple conservation strategy persists today. We are proud of it; the benefits are fantastic. They are shared by all its users, and I think in economic terms, in social terms, we can go on at some length describing, but I can tell you this much, the elk population that was threatened in 1971 has now reached at least 25,000. In fact, we killed more elk in this hunting season in the fall than we had in the entire population in the East Kootenays in 1971, and that is not too bad.

This process now has been extended to the Ponderosa pine bunch grass, the interior Douglas fir, and the Lodgepole pine in other parts of the province, the Kamloops area and Williams Lake area. I can't give you the acreages involved, but just to let you know that this process has been extended to these areas. This is a small part of British Columbia, and a large part of British Columbia is not treated in this way. This process is very actively used in parts of eastern Oregon, and parts of northern Nevada; it is used in large public landholdings like the wildlife refuges and most of the national forests in eastern Oregon. It is not being done on the VLM land, and it is not being done on all of the U.S. forest lands in Washington State. So again, you are looking at competent people in special locations; it just doesn't happen everywhere.

I would like to give you examples of some unintegrated, some disintegrated examples of conservation strategy which don't work. Forestry is the dominant land use in our province; it has far-reaching effects on other resources and their users. Forestry is practiced on the Crown land, the public domain, so the public has a major role, a major say in determining how these lands are managed. Terms and conditions of use are defined in the specific tenures between users and government. Throughout the province there are assorted public advisory groups, or Public Advisory Committees -- we call them PACis -- people getting together and they have these meetings and talk about what we should or shouldn't do with our forests. They are called Public Advisory Committees. The structure seems reasonable, very democratic, but they just don't work; that is, people don't know why they don't work. I believe first and foremost the forest companies in British Columbia are forced to accommodate so many interests that the logistics of meeting them are impossible, or nearly impossible. Plans are usually rejected, stalled, or revised so often that ways are created which interrupt the orderly flow of wood processing plants. Operating at highly integrated efficiency has become such a complex task that the slightest disruption has a major impact on efficiency. Running a highly integrated forest company is not like running a local industry or the corner grocery store, it is a very complex circumstance, and most people don't understand that. I say that quite firmly, and people who should understand it particularly are those who work in other institutions of the government service, and maybe more of the public should be aware of it as well, but they are not. It is very complex.

The majority of Public Advisory Committee members do not understand the ecological impact of timber harvesting, so they often oppose it on purely aesthetic or emotional grounds.

That is a lousy way to make choices or decisions of any kind. Misunderstandings are rife among the professional groups as well. For example, fisheries managers have berated forest managers for the impact of clear cutting on salmon and steelhead populations. There is no doubt that many watersheds have been modified by logging; however, steelhead populations have rebounded miraculously in many streams, particularly those streams on Vancouver Island. It seems that the catch and release frame introduced by fisheries managers had reduced steelhead harvesting in these streams, and the populations have increased as anticipated. However, forest companies are still being criticized for steelhead population declines that no longer exist in these streams. It is a habit that the fisheries manager has learned over the years, and he refuses to give it up. Well, there are a lot of them out there; I've worked with them for 15 years, most of them. Fishery managers insisted that forest companies keep all debris from entering streams. Clean, free-flowing rivers or streams were the operative words, yet recent research indicates that large amounts of large debris -- big, big trees -- are essential to maintaining the ecological habitat of salmon and steelhead, and, in fact, fisheries biologists are now happily replacing logs, stumps, and boulders in streams as a fish habitat program. This is a bit of a flip-flop, isn't it? Put yourself in the poor logger's circumstances; he has got to sit there and sort this out.

So residual stands of large diameter old growth set aside for coastal black-tail deer by the wildlife biologist is not important to the fisheries biologist, and he is standing up there saying, thank God you guys saved those trees for us, because some day some of those trees are going to end up in those streams to look after the salmon and steelhead. Wildlife biologists are not off the hook either; they are just about as bad. Many of them are just as critical of the forestry problems as the fisheries biologists were and still are. Many wildlife biologists firmly believe that timber harvesting has a negative impact on wildlife, particularly wilderness-requiring species, whatever they are, mountain caribou, mountain goat, and grizzly bear. The drastic decrease in caribou, goats, and grizzly population was coincident with the increase in timber harvesting, so it was automatically assumed that timber companies were responsible for the population decline. But the introduction of limited entry about a decade ago has turned things around, mountain goats and grizzlies particularly, because we don't hunt caribou, but mountain goats and grizzly populations are back to the good old days, the population levels are as good now as they were in the '50s.

So the combination of limiting or modifying the behavior of users and hunters, the access closures on specific roads and specific drainages, being very specific about what you harvest, when and where, has turned things around. Goats and grizzlies are as abundant now as they were in the '50s. Now, we have got a situation in the central regions where we are worrying about bluetongue and various other conditions, and 14 years ago there weren't any goats left in some of these areas. So I want you to keep these things in mind.

Even logging in high-elevation spruce/balsam forests is another point of contention, logging in high-elevation spruce/balsam forests in the south Selkirks -- not everywhere in British Columbia, but in the south Selkirks. Caribou habitat will enhance the procedure, and it works. There are people who insist that it shouldn't work, but it does work. But that is the beauty of this system: if you have got enough gray hair, enough time to just live through these things, you see them work. This knee-jerk stuff that we see, this one or two year stuff, forget about it. If you have got 10, 15, 20 years, you see things working, you know you are going on the right track, and you have got to stick with it.

Anyway, the same thing has been going on with elk. We have elk habitats now, especially in the dry interior forests, with tremendous success. It is a combination of timber harvesting and wildlife management that is highly integrated, and we have got habitats being created deliberately by logging companies, and we have got a wildlife management allocation process that allows us to use these populations. It works, but not everywhere.

So this inconsistency in fisheries and wildlife management, and the lack of understanding among the fish and wildlife managers, particularly in the area of forest ecology and hydrology, has been a major factor in preventing the development of a functional conservation strategy for fisheries, wildlife, and forestry. That is a broad statement, but the public isn't off the hook either. Public perceptions regarding hunting, fishing, trapping, grazing, are so diverse that it is impossible to incorporate many of them in an integrated plan. Some attitudes are incomprehensible. Unless there is a meeting of minds among professional resource managers, and realistic expectation by resource users and owners, a conservation strategy comparable to the co-ordinated resource management process is going to be around for a long time. In British Columbia -- I am just going to digress a bit -- in British Columbia, we have reached a point where there are no more forests to allocate, there are no more lands to allocate. How can we feed a starving world on the products of central and northern British Columbia? Fishery resources have been overfished. Our conservation strategy must address the issue of using existing resources by dividing them or in some way understanding how our numbers fit in terms of these resources that we have. Maybe, just maybe, there are already too many of us in the Province of British Columbia, or the Province of Alberta, if we want to maintain this particular lifestyle. Nobody likes to touch on that. We have got to maintain our lifestyle, but just maybe there might be too many of us to maintain what we are doing now.

So despite our vastness, we may not be able to support the human population which we anticipate. Politicians generally like to reject these realities. In fact, all of them -- I haven't met one yet who sincerely believes that more and more of what we already have or what we are already doing is possible. We have been indoctrinated and convinced that our resources are limitless. There are no limits to human population; it is a grand illusion, or a grand delusion which ultimately will be understood by all of us. So we need a vision and the political will to overcome this obstacle, and a conservation strategy is a very good beginning. Thank you.

(APPLAUSE)

CHAIRMAN KURE: Any questions particularly for Ken at this moment?

DR. FENNA: Lois Fenna. Can you tell me what you think about wolves?

MR. SUMANIK: The wolves and the caribou have had an understanding with each other for centuries anyway; it's pretty hard for your average ecologist to understand that. I can talk to you later about it.

MRS. BROADBENT: I was wondering about the hierarchy that exists between resource planners. We have integrated management planners here, but it seems that some planners have precedence over others; usually fish and wildlife are at the top of the heap.

MR. SUMANIK: The example I quoted you was one that focused on range forestry and wildlife using the same land base, and the confrontations on those lands were horrendous. What we did then was sat down and tried to sort out how we could work together as a group. We didn't priorize anything, we just said how can we sort this out, and we took a series of steps that we thought had to be taken, defined some objectives and made some statements about what we thought had to be done out on those lands. We didn't priorize them, we just listed them and said we have got to address these problems. Once we got by that, then we sat down and said, how are we going to do it? I think if you can keep that sort of process: you are all in the soup together, you have got to get out of it together. You can't say I am more equal than you; that doesn't work. We all have equal responsibility and we all have to share in this decision-making process. I can show you some of the things we can do; they are really simple, so I will catch you later.

MRS. BROADBENT: Thank you.

MR. SURRENDI: I will give you some observations in Oregon that you examined, Ken; I've had some similar experiences in northwestern and southwestern United States examining various wildlife refuges down there. The interesting thing about those refuges, the bulk of them that I looked at were areas that had been destroyed by the agricultural community in the '30s and in some way acquired by them because nobody else wanted them. The thing is now they are more productive for both wildlife and livestock than virtually any of the areas around them. I think the key is they are run by good wildlife managers rather than, as you alluded to, the VLMs and forestry service. I think it would be real interesting to examine a lot of those case studies as to who is running the places and why it is running them so well.

MR. SUMANIK: I agree.

MS. POSEY: Maryhelen Posey. One comment, I guess, more than anything else. You talked about preserving our quality of life as one potential aim of the conservation strategy. The aesthetic grounds which are so denigrating which we heard earlier are a part of that quality of life -- I'm not saying that we should be making all our decisions on aesthetic grounds, because right now they aren't as valid as the hunters, foresters, miners.

MR. SUMANIK: I appreciate that, but if you want to make an omelet, you have got to break an egg.

DR. ROSS: W.A. Ross of the Energy Study Group. I want to try and respond to what I thought was intended to be a provocative type of interpretation, and I will try to summarize it in as provocative a way as I can, and excuse me if I paraphrase incorrectly. What you suggest is that you get good resource management when you have teams of open minds, professional resource managers and developers involved, but whenever the public is involved, it represents such a schizophrenic view that it can't be productively useful.

MR. SUMANIK: You clearly misunderstood me.

DR. ROSS: I was rather hoping I had. I wonder if you might indicate the role of the public involvement in the successful resource management teams that you described?

MR. SUMANIK: What has happened certainly with our Public Advisory Committees -- I hate to see it, but it has happened -- we started with really concerned citizens, and some of them got so upset with the dialogue among themselves, and to some extent by some of the managers, that they just decided to stay home. So through a process of dialogue and distillation, we have ended up with real cranks. That's right: we do not have a good rational representation any more. We have a guy, for example, on our Public Advisory Committee who uses Roundup like an underarm deodorant. If a forester wants to use a pound or two to move a shrub or two, he should be locked up. We have a lot of this; a lot of these things develop. There are expected standards of behavior, too, that people have to consider: if they want to participate in an active dialogue, they should make an effort to at least be informed, and a lot of them aren't. Those who are informed have a responsibility to the effectiveness of the decision-making, but there are a lot of people who are not informed. I want that point to come through. There are a lot of professionals who are not as informed as they should be either, but I think I made that point quite well.

DR. ROSS: I think you made that point. My question was, what is the proper public involvement role in management? Clearly what you said, that the way in which you have done it has not been very successful -- it seems to me that these issues are important matters of public policy, and that the public doesn't respond very forcefully and, quite emphatically, when things are done inappropriately. But, clearly, there needs to be public information and participation programs associated with these. They don't have to be the kind that you have described; I can think of many others that have worked elsewhere. I am just trying to understand what the desirable end is in terms of public involvement?

MR. SUMANIK: I have had two experiences, one experience where we started with a roomful of shouting, screaming Doukhobors concerned about their water boxes, other citizens concerned about their water boxes. You take a situation like that: in three meetings we went from 300 people to 30, and those 30 people literally steer the rest. Now that is not from Nelson where I live, but you let them go over to Creston -- we had the same thing at Creston, and we got just the opposite reaction. It really defies description. I think they should be studied. Bill, I wish I could pinpoint accurately why we get these reactions. In some cases you get rational involvement, in other cases you don't.

CHAIRMAN KURE: Anyone else? Thank you again, Ken.

(APPLAUSE)

CHAIRMAN KURE: If you haven't read the long history or biography of these speakers, I point that out again for Dr. David Munro who was introduced this morning as keynote speaker. You do have in your kit a resume of the speakers, so please refer to that if you want an accurate description of their involvement.

Dr. Munro is filling in on the British Columbia experience with provincial conservation strategy; he has done us a great service in bailing us out and being the speaker on that particular topic today. So the British Columbia experience, Dr. Munro.

DR. MUNRO: Thank you, Elmer. I won't speak for very long, because I think you have heard enough of me, but I will speak about a little more than the British Columbia experience. The first remark I will make is that the next conference that I manage is going to be one on human behavior. I don't know if any of you have ever heard of a chap named Nicholas Pulounis (phonetic); he is an elderly and somewhat eccentric conservationist with some money who has so far sponsored two private international conferences. One was in Helsinki, and another was at Reykjavik. He gathered together eminent people, and he put on a pretty good but very conventional program about conservation and the environment, and each one has resulted in a substantial volume of interesting papers. After the last conference in Reykjavik, which I think was 1977, he wanted to put on another one, and he gathered some people together and it included me, because I lived near where he was then. I tried to persuade him that the next conference should not just simply be another way, another attempt to define environmental issues and the technical solutions, but it should rather be devoted to how you influence human behavior, because it was my feeling that we needed to try to learn how to change attitudes and points of view. We also needed, as Ken Sumanik has suggested, to understand better what are the modalities of trying to get people to grow, to learn, and to work together. So that is the next conference I would like to be associated with; I think it would be pretty important.

I am going to take a moment or so to tell you not only about what has been happening in British Columbia, but also in the other parts of Canada, because I think it will be of interest to you, and it won't really take very long. The first reaction to the launching of the World Conservation Strategy in Canada came about a year later when John Roberts, then the Minister of Environment, announced that the Federal Government endorsed the strategy, and that put Canada along with the ranks of some 50 or more other countries in the world. Environment Canada set up a study to look at the activities that were being undertaken by various federal departments to see to what extent they supported the World Conservation Strategy, and to what extent it would be able to modify them in order that they might conform better. That was in about 1983.

They are now repeating that process, reviewing the federal activities. At about the same time the Federal Minister of Environment wrote to all the provincial ministers and asked for their point of view with respect to the strategy, and asked if they would be willing to endorse it. And the responses were generally positive, but in many cases, that is all that happened. Nothing else happened.

In 1981 or '82, the notion of having a conference to review the implementation of the strategy about which I spoke to you this morning emerged out of a meeting between people in the Canadian Wildlife Federation and myself, and at that point, I began to contact people in various provinces largely through the Fish and Wildlife Federations to see if it would be possible to generate a sort of grassroots in preparation for provincial conservation strategies. There has been some response in a number of provinces, and really none in some others; I will go over the list in a minute.

In British Columbia, in 1983-84, beginning of '84, a steering committee for a conservation strategy was established in an informal way on the basis of people having a personal interest, or representing interested organizations. The steering committee had several meetings, and determined that it would be useful to proceed with the strategy, but that it should be done on the basis of a consortium of interested persons and organizations, rather than making an approach to government. It was determined that it would be essential to hire someone to do the work of preparing a prospectus and to establish a sort of consultation process that would be necessary in the long run to accomplish that task.

A number of us tried to raise money for this purpose. We got a little money, we got $5,000 each from two national conservation organizations, the World Wildlife Fund (Canada), and the Canadian Wildlife Federation. This enabled us to hire Lloyd Rushton, who should have been with you today, for a relatively short period of time, and to begin the preparation of a prospectus and to produce a brochure and so forth.

Lloyd Rushton is a graduate student in environmental studies at the University of Victoria; he is a person who has been out and around and worked in various public service organizations and private organizations for some time, so he is a mature and competent person, but he needs work, and when the $10,000 ran out, he has had to find other jobs to do. The reason that he couldn't come here today, despite the generous offer from the Environment Council of Alberta, is that he had found some other work for a period of time and he just had to stick with it for a while. So that shows you the sort of hand-to-mouth type of operation that is being undertaken in British Columbia, and it should give you more reason to say thank God for the Environment Council of Alberta.

We are still endeavoring to find additional funds in British Columbia to carry us to the point that you have already reached in a shorter period of time than you have taken. I think we will be successful; we are collecting donations on the average of about $100 from interested people in order to bring Lloyd back from time to time to do some more work. We have gathered together in volunteer sessions, and we are going to produce a rather shorter prospectus than you have, I think, and we will then be using that as a means of trying to raise more money that will enable us to go to public meetings. We will, at some point along the line, be seeking a degree of support from the provincial government in carrying out this exercise. I should mention that because of the obvious constraints under which we work, the exercise has been rather largely southwestern-British Columbia-based, and I realize, of course, that that is a very serious obstacle that we have to overcome in due course, but we will; I'm sure we will.

So that is the story in British Columbia. There are some very interested and keen people. We have something going, but it is being done with some difficulty.

In the other provinces, Manitoba and Saskatchewan, to the best of my knowledge, have nothing underway, either by NGOs or by government, although there are signs of interest, particularly in Saskatchewan.

In Ontario there is a body called the Conservation Council of Ontario, which is a sort of umbrella organization for conservation NGOs. The Conservation Council of Ontario persuaded the government before the last election that it would be useful to assess the programs and activities of the Government of Ontario to see to what extent they conformed with the conservation strategy, and to determine what gaps there might be in those programs. They did receive a contract to do that, and they are doing it. I would suspect that with the change in government, because of some circumstances that relate to particular individuals more than anything else, that there probably will be an accelerated action with respect to preparing a provincial conservation strategy in Ontario.

In Quebec, both a private group, which has had a number of meetings and has planned the outline of a prospectus, and one of the government departments that has been collaborating with them, are beginning to take action. But I don't think that anything of substance has been produced yet.

In the three Maritime provinces, or in each of the three Maritime provinces, there have been formed committees which bring together representatives of NGOs and concerned government departments, and they have expressed their intention to proceed with provincial conservation strategies.

In the North, there was appointed and has been reported an Advisory Committee on Northern Conservation, and this was funded by Indian and Northern Affairs. They have produced a document that relates primarily to land-use planning and the establishment of protected areas. So it covers many of the elements that would be present in a Northern Territorial Conservation Strategy, but by no means all of them. Further action there will await, I would say, the consideration of the report of that task force, of which, incidentally, the secretary was John Nesmith (phonetic), an employee in Calgary who some of you may know. He is now in Nepal helping with the conservation strategy there. The future of the work in the Territories would, I suppose, depend on the action that the government there proposes to take as they review that task force report, and, of course, upon the pressure that may be put upon them by the citizens and the NGOs that are interested in northern development and conservation.

I think that probably serves to wrap up, as far as that is concerned, and I guess I can perhaps best conclude, since the telephone isn't going to ring to cut me off this time, by saying once again that your efforts undoubtedly in what you have produced and the sort of support that I can see by our all being here is ahead of any other government in Canada, and I hope that you continue to work in such a way that you keep ahead, but not too far ahead; I would like to see the others catch up.

(APPLAUSE)

CHAIRMAN KURE: I probably should have mentioned that, I guess of the three speakers that we have had, David Munro is the one I have known the longest. Back in the '60s, when he was chief of the Wildlife Service, and I was involved in some efforts down East, I was sitting in the back seat as a back bencher of the day, and sort of in awe of the command of the situation that David Munro had. I have always been impressed by his work, and I need to say that, because of his leadership in the World Conservation Strategy and now out of his home in Victoria, co-ordinating this effort across Canada, we are probably going to see or realize a conservation strategy developed across our country in time. We have the time that many countries don't have to look at how we use our resources, both renewable and non-renewable, for the day when we will be completely dependent on our renewable resources, likely, for the quality of life that we have been accustomed to.

Now, questions to any of the panel at this time. Horst?

MR. FAUSER: Horst Fauser, Environmental Protection. I would like to ask Ken: we have quite a few planning teams in this province that address certain areas, and I must say they are quite qualified and they do a good job according to the data available. The only problem we have in here, before these plans can be implemented, we do have physical interference and decisions will change, and plans aren't worth much. I wonder do you have similar situations where political interference -- or were you allowed to implement your plans without these?

MR. SUMANIK: We had no political interference whatever. I think that is very important; that is a terrible constraint. You can't make bread without yeast; you can't do it.

CHAIRMAN KURE: Just as a follow-up to our next question coming up, when I was introduced to Ken Sumanik, it was 10 or 12 years ago. I was out looking at the same thing that they have started in British Columbia with the assistance, and I don't think Ken mentioned the use of ARDA funds at that time which helped them get going. We had the ranchers out on a tour with some of our forestry people to look at the process and we, as we understood it, relative to Horst's question, had the co-ordinator of resource management concept as opposed to the Alberta experience, which we know as integrated resource planning here. The difference, though, is that there it appeared that the plans were emerging as a grassroots group that said, here's our problem and we will sit around the table until we get a plan underway. In Alberta it emerged as a plan for the top bureaucratic level and it filtered down eventually to the Public Advisory Committee, where they were sort of at arm's length to the planning process. Maybe you can recognize a little bit of the difference that Horst is talking about. We do have quite a lot of political override in Alberta.

MRS. BROADBENT: I have a little bit of a question. Elmer mentioned that David Munro is the guiding force behind the Federal Conservation Strategy; I would like to remark that I feel that Elmer has been the guiding force behind the Alberta Conservation Strategy, and I think we should all recognize the work that he has done over the years to bring about this beginning of the conservation strategy. Also my question was, I wonder if we are going to be duplicating our activities. Could the provinces join forces so that we are not duplicating one another in areas where we overlap? It seems to me we are spread so thinly at the moment, that the more we can help one another, the easier it is going to be. I don't know who can answer that.

MR. SUMANIK: I think we can probably each offer a comment; in terms of applying a plan it is very important that the actual things we are doing be one and the same thing, that there is no political interference, and that they are sound ecological principles. If a plan is ecologically sound -- you have to work with ecological principles and the people who understand that, and no political interference, and there is nothing wrong with everybody learning how to do things, because they do appreciate them after a while. And to me, to see the experience that has taken place here in Alberta, I would really welcome the various programs. As a matter of fact, as David has mentioned, if we try to put something together, it is probably going to be better than may be created otherwise, knowing what the circumstances in British Columbia are today. I don't hesitate to say that, but I truly believe that each of us has to do these things by ourselves.

MRS. BROADBENT: I agree with that, but we have got so many miles to travel, that if somebody can do a few miles for us, it is going to help us.

DR. MUNRO: May I comment on that, I think there are two points to make. One is that these things have to take place at several levels. We need a world strategy; we need to develop this, and we are going to perfect it as time goes on. We need a national strategy because of certain powers that national governments have, and we have a national identity, and therefore we have to deal with certain problems in that context. And, similarly, because of the responsibility of provincial governments in Canada, we have to have provincial strategies, and we have to apply the same approach right at the local level when we are talking about whatever unit of land you are concerned with, as Ken was talking about. I think that is one point.

MRS. BROADBENT: I am concerned with – my study group is concentrating on wetlands, on anything that happens there. So anything that is happening in Ontario, Manitoba that applies to our wetlands that we can use, that would save us a few steps. Why not use it?

DR. MUNRO: That is why we have meetings, to learn from each other.

MRS. BROADBENT: We need a network so that we can communicate easier with one another.

DR. MUNRO: There is a network of sorts in that there is Mike Kelly here, and Lloyd Rushton and people in most of the other provinces are now exchanging minutes of their meetings and so on and trying to keep each other informed. Now, it is not a big network, but the beginnings are there.

MRS. BROADBENT: Thank you.

DR. MUNRO: Could I say something, Elmer, in respect of Ken's statement about political interference. What is the matter with the politician's point of view? Why shouldn't they be just as entitled to express a viewpoint about an issue as anybody else? Let us examine it further. I think that you really perhaps wanted to say something more specific than you did. You know, there is bureaucratic interference, too; you have people in different agencies who feel that their future depends absolutely on not only maintaining their exclusive prerogative to deal with certain issues, but also on expanding it. We know about those sorts of things, that it works for governments, don't we, and so maybe we should pay some attention to that. If by political interference you mean the use of political power to secure unfair advantage, or to secure advantage for particular interests that is not warranted by facts, okay. But I am saying that we have to recognize that obviously there is a political dimension to all this sort of thing, and it is quite valid.

MR. SUMANIK: Maybe I can comment: the circumstances that we find ourselves in in Kootenay had deteriorated to the point where a politician had said look, get that mess under control; we don't give a damn what you do; we don't want to hear about it. Now that is the kind of political support you need.

DR. KAFTON: I think that if you can write one World Conservation Strategy, you can write one provincial strategy, in the sense that there are certain questions that each province or state in the United States asks. The strategy isn't the plan itself, it's the framework and a method of getting at the information you need and organizing it and developing an effective plan. That is part of the basics for each province, but it might really help to work closely together at putting out a provincial strategy.

CHAIRMAN KURE: I was going to say, Dorothy, thank you for the compliment, but certainly we have been following the lead that has been taken by David Munro, and the efforts in Canada, and I guess the only reason that there are 111 pages in that prospectus document is to be able to tell people all these questions that they would evidently ask. Really I think our steering committee agrees that we could probably put our message on one page, single space it, but the questions would inevitably be asked of us: where did you get the ideas, where did it come from, where did it start, what is the application provincially, and that is all in there. And then where are we going to go from here, and obviously -- that is obviously where we have got the 110 pages. And we borrowed from others; it is all in your document where we got some of our stuff. There is really a network, as David has told us, and we now have it going across country. It is like the plague; it spreads right out, like the chinook winds that come across Alberta. Obviously Saskatchewan, Manitoba will be borrowing our document, and I'm sure they will be welcome to it.

MR. PASCHEN: Gerry Paschen, Non-Renewable Resources. With the study group I have known that there are people who are dedicated who have looked at this phenomena of Alberta Conservation Strategy for some time and it never seems to have worked in the past. Since 1947 we have discovered oil and we have made a lot of publicity and we know there is oil in Alberta and all kinds of workers have come to look for work and they are quite dedicated to extracting it. We recognize in oil production and oil field work and the technology, and all of a sudden we come up with a conservation strategy -- how does the outside world look at Alberta when we start to turn around? While we are debating the issues here today, I have to raise to myself the question -- it is no good if I just keep it to myself -- is the western sedimentary basin really pumped out dry so that the green light is given for energy conservation strategy? Secondly, while the oil was still in the ground and we have individuals struggling to keep it in the ground for future generations, was that voice overheard and overlooked just to line the pockets of some individuals, and now all of a sudden the message is given for energy conservation? Thank you.

CHAIRMAN KURE: Does anyone want to tackle that? It looks like they have left it to me. Well, I suppose you could say that some of us remember quite clearly a few years ago the documented and known reserves of non-renewable energy were in fact down to a very few years; do you remember that, Gerry? Lo and behold, conservation started to be taken seriously, and lo and behold, the demand dropped off. The planning that been done by the major industries in our province -- and some of their representatives are here -- the planners changed their projected dates for various large megaprojects; I guess that is one of the advantages of projections. We have found out how radical and untrue some of them were. But, obviously, the thinking that is behind this strategy is rather than waiting until we are completely dependent on the system, now is the time to start planning. We can see, if we want to get the figures. We should get them from our own Energy Resources Conservation Board; they will tell us exactly where they think we stand relative to the end of the line on certain non-conventional crudes, and so on. So we know that we have a breathing space. Obviously we may need that space to involve the shift that we will need in this province. Maybe some things won't need the same emphasis, because we may be able to use other things. That's why we should be the first ones in Canada to develop a strategy, because the shift will have to come. It will be a major problem for people and the government of the day unless we can make the transition. Ken, you have a question?

MR. NELSON: Yes, Mr. Chairman, Ken Nelson. Forgive me for bringing this up again. You have all kind of touched on it, and skirted around it a bit, but I would like to perhaps get you to go at it directly, and that is this matter of the relationship between an Alberta conservation strategy and the relationship of those coming along in all directions around it. It seems to be that achieving a successful conservation strategy for Alberta will be easier, to the degree that we are not doing this in isolation from our neighbors far and wide. Does that sort of suggest that we have got responsibilities part and parcel of this program here to see to it that our neighbors are somehow keeping step with us, if indeed we are successful in progressing along this way? Are we going to have more trouble if there are delays in British Columbia, if Saskatchewan ignores us completely, if nothing happens in Montana? I would like to have your comments on that. Maybe you would like to speak directly to that? Any three of you who want to take it on?

MR. SUMANIK: Ken, I think that there are activities, cultural activities based on segments of our society in British Columbia that you don't have here. You have a commercial fisheries probably here in Alberta, and we do in British Columbia too, but ours is probably more diverse and more complex. Part of that fisheries is somehow involved with the forest industry and so on and so forth. It is an indigenous sort of thing. So each region will have its own unique characteristics that allow us to do something slightly different from its neighbors and so on. I think that you have to keep that in mind: there's no question that the strategy here in Alberta will be different from the strategy in Saskatchewan. Its purpose will be the same, some of the elements of it will be the same, but there will also be differences that are indigenous to both provinces. I think that a good strategy will reflect that.

DR. MUNRO: I agree with what Ken has said. I think you have to add to it that there are certain areas of interest where obviously there has to be some interlocking, and to the extent that there is a lag in these matters in neighboring jurisdictions, or with respect to Canada as a whole, then the structure is going to be imperfect. But, in due course, perhaps we will fill all those things in. The obvious example, of course, is the watercourses that cross boundaries. As you develop your strategy, you develop certain policies, goals and policies, and eventually action plans with respect to the management of waters that flow into Saskatchewan, for example, or into Montana. At some point there has to be some consultation about this. There are legal requirements, and, of course there are also just logical requirements.

With respect to migratory species, the same sort of thing will occur. With respect to air management, air being a mobile resource, you have the same thing. So obviously you can go a long way on your own, but it is important that there should be progress in neighboring jurisdictions in Canada as a whole. I don't say that you have a responsibility to ensure that this happens, but you certainly would be rendering a service to the extent that you are able to lend the weight of your organization to trying to ensure that the action was begun in those jurisdictions.

DR. KAFTON: I mentioned earlier that our group has been experimenting with collaborative planning, trying to test some mechanisms. One way that we did this was to address the problems in forestry, let's say with a species like Douglas fir, which covers millions of acres in California but also runs up into Oregon, Washington, and British Columbia. We did the same thing with salmon which runs into British Columbia, Oregon, Washington, and

Alaska. Or you can take agricultural groups: we across Canada and the States, we share something in common with the foreign countries I mentioned earlier that have the wild relatives. So it is really important that you share not only information, but you can share financial resources in some of these areas where there is research to be involved; certainly it doesn't pay to start separate research programs. So it is vitally important that you find out what you have in common and what you don't, and that is part of the whole planning process.

MR. NELSON: It comes down to a form of enlightened self-interest.

DR. KAFTON: Certainly. To do total planning by yourself, it might be prohibitively expensive in some cases, but if you share the burden, then it can get done. So often you can go from not accomplishing anything to getting something done by sharing the burden and so forth.

MRS. ROBINSON: Robin Robinson, Environment Protection Group. I am wondering if the panel, and perhaps Dr. Munro, would like to address the points that Dr. Kafton brought up about specifics. The strategy at the moment is not dealing with specifics, and at the end of his talk he did bring this point up. I would like to hear your comments on that, or the panel together discussing that aspect.

DR. MUNRO: I think it would be better if we spoke separately.

MRS. ROBINSON: Oh, yes, certainly.

DR. MUNRO: My view of the strategy – the last chapter of the strategy is an action plan. Now that still is not very specific, but it indicates where, in respect of what sectors and what functions and so on, there should be action undertaken. It may, for example, say that there should be some revision of government structure, or there should be some focus on a certain sort of research, or a change in a certain sort of law or what have you. So I think that the strategy goes that far. It identifies the priorities for action, and it identifies the actors. Now, at that point – and most of the actors, of course, will be governmental, but not all of them – at that point it becomes the responsibility of those people to take that action. In Alberta, for example, I think it would be a continuing responsibility of the ECA to ensure, to monitor the action that is recommended.

MRS. ROBINSON: I guess what it comes down to, going back to your organization, probably one is going to get the question of, well, this is fine philosophy, but we have had it before. It is not specifically.... But people do – this has been brought up already as a question – but people keep saying, do we need more of that in our provincial strategy? I guess I bring that up.

MR. SUMANIK: Are you concerned with where you're going to go? Let us break this out in various elements, and let us take Pacific salmon as a case in point. British Columbia and Alaska, the United States came to a formal agreement this summer: we have a salmon treaty. I thought a treaty was something that countries had a little skirmish or two, but anyway, we have a salmon treaty in place right now, and it is probably one of the most important things that has happened in the province as far as fisheries go. We have been fishing for years, and we not only have got an agreement, we have got obligations to each other that we never had before. When you get these kinds of things built into our behavior, you end up resolving situations, not making them worse. As an example, it was a few years back when the United States decided that they were going to do something different. They found that Cohoe salmon, which is one of six races of Pacific salmon -- we have five in British Columbia and Alaska, but there are six, and that six exist over the western Pacific -- they have got these salmon, introduced them to their particular streams, and they were going to raise salmon, and lots of them. I forget how many millions of fry they turned out, and they got one back, or two back. They are really doing something independently; in a highly integrated ecological system they are trying to do something different. They didn't have a plan or a strategy, and it failed, and that failure gives you a good perspective. I always use that to get me back down to earth again.

MR. STOKER: Dan Stoker, from the Environmental Education. Ken, I'm a simple person, and I learn best by example, and I can appreciate the fact that you brought some examples for us. You, yourself, didn't reinvent the wheel; you went to eastern Oregon to bring something back that worked. I share with Dorothy Broadbent the concern that we don't necessarily want to reinvent the wheel, but to use what others have to offer. I wonder about this model: can you give us a little bit of a feel for something that worked in your strategies, or strategists, as you call them? I wonder if it can be extended beyond wildlife concerns and the area that you were talking about, and I wonder if there is something to be learned for our Alberta provincial strategy? I am concerned on two points though. There are two things that you said, if you would recommend, or you had reservations about, that are going to be adopted here in this province. The World Conservation Strategy suggests there should be priorizations; that is one of the first things in fact you do, and yet you suggested that when you were working in your smaller group, setting priorities wasn't particularly important. The second concern is public involvement; we are looking at a proposal that suggests public hearings. I got the feeling, and maybe I am stretching the point, but I got the feeling that you didn't think that was maybe terribly productive, that maybe the professionals should be the ones to make the decisions.

MR. SUMANIK: I appreciate this notion that we borrow ideas from others; you just have to. You have to share information and experience with others to be efficient; I agree a hundred percent. We just can't thank people in Oregon enough for what they did for us, and I think those are the processes that apply here. But, again, they only work if you have the political will and the competence and the concern. If people sit down and say we want to make this thing work, we are committed to making it work, it will. If you just take one person in that same institution who says I want no part of this, it will come apart. We used to have a philosophy: all of the people who are together on a piece of land, say, timber, wildlife, and the grazing, we will work with, and those who weren't committed to it, we left them alone, and they came in the back door; they came in later. About public involvement, I have been involved in many, many ways with the public, and there are so many different kinds of interactions that there is no standard format. Now we had a public involvement process a few years back; we were reviewing forest management in British Columbia. We had public hearings; we had enormous debate with the public and forest users, and it was a very important discussion. We actually had lawyers conducting these discussions, and what we were getting was essentially very crude dialogue, very starchy, stiff dialogue, the kind of stuff that you normally get; the intuitive stuff and the real concerns, you only get that at the local forum, grassroots, town hall meetings. You know, I think the professional is obligated to sit there and listen to concerns. And how do you interpret public concerns to sort out the real from the imaginary, because a lot of it isn't necessarily right. There is a lot of illusion out there, and you have to keep that in perspective too.

MR. STOKER: One of the neatest things that came out of your talk to me was a possible vision as to what this strategy might be as its top priority. I happen to believe in the "small is beautiful" approach, and one of the concerns has to be addressed to the local level. The Alberta conservation strategy fails before it's even started practically because you think there is one holistic way of doing things. So when I heard you talk about the mechanisms coming from eastern Oregon or Timbuktu, it didn't particularly matter. If it worked, dealt with local problems and concerns -- maybe it wouldn't have to be wildlife and conflicts with forestry, maybe it is agriculture and conflicts with fishermen; it doesn't really matter -- but there is a process there. And it may be the top priority of the Alberta conservation strategy if you set up that mechanism here, everywhere, all over the place, to deal with the local powers, but show the people how to do it, how to get together to solve problems.

MR. SUMANIK: We tried to do this in other areas of forestry and other resource conflicts, fisheries on the coast for example, and we haven't met with much success. So what might work for one area may not in another; it is very, very difficult.

CHAIRMAN KURE: Maybe just to enlarge on what Ken has said -- because I think that is what is worrying a number of people -- how do you deal with all of the tremendous amount of issues. I am just going to give you a couple of examples that I am familiar with. We discovered a long time ago that the formula for basing delivery quotas of grains to the Wheat Board were in fact detrimental to conservation, particularly around potholes, wetlands, and so on, where actually the incentive was built into the delivery system to deliver so many bushels of grain per acre of, say, some cultivated acres, and it actually encouraged the cultivation of more land. Alistair spoke very clearly about the need or the non-need to do that. We have already asked the Wheat Board -- I say we because I have been involved with Habitat Canada and we can deal with so many of the issues that are on an international level through a number of our agencies that work for us back home -- we have asked simply that the Wheat Board quota system be revamped, that farmers be given quota credits. It is in Alistair's report on the expansion of agriculture, it is in the Senate Committee report; they have recognized that as a problem. It has actually put landowners in a bad position, with the high overhead of today, by encouraging cultivated land that they should never be spending $75 or $80 an acre on in term of overhead costs when they are only going to get a crop every other year. Some of the fellows are doing that, and they are going to have to look at a different system that encourages them to stay off of those acres and they will benefit wildlife and wetlands, the whole ecology. There is, of course, a host of examples of specifics on how we get at it. We have got a number of streams in Alberta that are going to pot because of overuse by livestock. We have introduced fencing programs and Ken stated very clearly, the ones that are going to mean-mouth you and think it is a bad idea, leave them alone. The fellows that co-operate, you work with. You work with the winners, and lo and behold, and I could point out an example where the first half of the landowners went into the program, and now they are all in under their own steam. So success works for you and that's the way a conservation strategy, I think, will bloom. We will work with the successes, and we will get the others to follow.

UNIDENTIFIED SPEAKER: I consider one of the aspects that the speakers have alluded to is the time in conservation. I am in agreement with some of the eminent conservation and population biologists in proclaiming, unlike the conservationists, that if you want to call it a discipline, fine, or science, but unlike any other discipline it has a time limit. If we don't incorporate the factor of time into any conservation strategy, I think that -- I firmly believe that we will lack any direction, and a conservation strategy will be somewhat meaningless, or it will be totally different when everything that we want to preserve is gone. According to one estimate recently published, in nature we believe at least 100,000 species will be [inaudible] locally in the next five years. To me that is a tremendous loss of a genetic pool, of a genetic diversity. So what have we been doing in terms of a planning strategy without building in it the factor of urgency that relates to time? Any one of the speakers can address this issue.

DR. KAFTON: In the strategy there are three criteria: One is the urgency, and another is irreversibility, and the other is significance, and so we must take into consideration time. In addressing your question about getting down to specifics, the strategy itself I don't believe will deal with specifics; it is when you get the actual assessing, setting objectives, developing objectives for the province and at different levels within the province, assessing how they relate to conservation that you will get down to specifics. I think it is really important, as Ken said, to deal with the local level, but it is important, as Ken said, to deal at the provincial level too. I am thinking of California as an example that was brought up last night about the fact that in the central valley of California, where most of the agriculture takes place, there has been a lot of irrigation, and along with irrigation and high yields has come the application of pesticides and fertilizers that have gotten into the water table. Also the water contains salines and other poison chemicals. One solution to this has been to build a drain -- some people call it a sewer -- from the valley into the San Francisco Bay and flush out all the salts and so forth, and everything else out there. This has been stopped so far, and we are in a quandary. Part of it, as was pointed out, is because urban people don't understand agricultural problems, and people in San Francisco Bay don't want the bay full of this stuff. On the other hand, if we had had a conservation strategy in place many years ago, we might have practiced a different form of agriculture, done things differently in terms of water development and so forth. These are complex problems; it is not easy, this application of long-term planning to try to integrate all the different sectors and so forth. No one can say it is easy, but you are involved in a pioneering effort of developing a process of doing this. Other countries are also trying to do the same, and sharing information and so forth we are bound to come up with better results than what we have now.

CHAIRMAN KURE: Are there any further questions to the panel? I think, first, David Kafton came a long ways from Berkeley, and I know that David Munro was from Victoria. We have sort of learned to depend on him for advice and he has certainly been a great support for us, and an advisor when we wanted to check on direction. I guess that is the way the network works for us. Ken has come over the hill a few times before to talk to stockgrowers in Alberta. It will be interesting for you to know that stockgrowers in the Alberta Fish and Game Association made a presentation to Ken back in the '70s. So after visiting Ken and his crew in British Columbia and being quite enthusiastic about the planning process they had going – it was solving land-use conflicts and degradation as a matter of fact -- I brought the complete file of those plans back, and at the request of our Minister in Alberta Lands, I laid it on his desk. The next day we had integrated management planning going. It wasn't exactly what was suggested, but we have got to thank Ken too for the support that they have given us over the years. I think we should all join together; I think we have had an excellent panel, and they should have helped us in our prospectus. What do you say?

(APPLAUSE)

Dr. Dalton: My thanks to the panel as well. I just want to remind you about the films tonight here at 8 o'clock, and the facilitators' dinner, which will be held upstairs in the dining room, and bright and early tomorrow at 8 o'clock.

(CHAIRMEN'S REPORTS published under separate cover; they are available through the ECA Library)

(MEETING ADJOURNED until 8:00 a.m., December 7, 1985)

MORNING SESSION – Saturday, December 7, 1985

CHAIRWOMAN DALTON: I would now ask Dave Buchwald to report on behalf of the ECA Research Division.

MR. BUCHWALD: The research staff are that batch of people on the other side of the library that you see scooting back and forth for coffee when you are in there. There are about six research people in total, and what we try to do is cover as many disciplines as possible to co-ordinate the ECA activities. It seems it ties in a little bit with some of the discussions on the conservation strategy, and we rotate them to a variety of different functions so they have a good familiarity with different things and different disciplines. So if you talk to somebody from the research staff, it may be difficult to detect what their original discipline was; we have done our best to rotate them.

Our program is summed up in about three areas: there are the activities that relate to public hearings, those that relate to questions for the Minister, and those that relate to assistance to PAC.

In terms of ministerial requests, in the last year we have been finishing up reports on the administration of the Clean Air and Clean Water Acts.

In terms of public hearings, I think everybody knows the agriculture hearings were finished last year, and there is a kind of ongoing assistance to the Agricultural Panel, so there has been some time filled up in that. The major public hearing activities have been oriented towards development of a recycling set for next year. There have been several reports created; they are in the editorial process right now, and I expect they will probably be available early next year. I would like to thank SAC for providing technical review on them and pretty useful comments. They are a superior product as a result.

The reports we expect to have available are: a terms of reference report that will provide formal background for the formal order-in-council and an overview of the rest of the reports; there is a report on recycling in Alberta, and it gives a detailed discussion on the major recycling systems in the province now, particularly those that represent the oil and glass and rubber and ferrous metals; another report deals with the attitude in the province towards recycling. It is called a Social Perspective of Recycling in Alberta.

There is a report called Municipal Solid Waste -- Alberta's Untapped Resource; it essentially looks at what is in a landfill and what it represents as being useful to the recycling business, and of course the environmental benefits that go along with that. There is another report that deals with the economic considerations if you wish to increase recycling in the province, and raises a number of options for discussion at the hearings.

There is one report that was prepared for you people a while ago that we are bringing back as background information to the hearings, and that is The Use of Municipal Waste as Fuel. That is in the information package as well. Alberta Environment is preparing a report for us on legislative programs for resource recovery, and we hope to have that one available as well; it is taking a little while, but we will eventually make it.

As a result of doing all this, we have a pretty reasonable bibliography, and that will come out as a different document.

I believe everybody, or those of you who are interested, probably saw a film last night on "One Man's Gold;" that will be a major part of the information program. This batch of material is all coming off the word processing assembly line at the moment, and I would expect it would be available early in the new year.

So those are the things under ministerial requests and public hearings, and last, of course, is the conservation strategy. I think you have had enough background on that at the moment, and I will leave you with that.

CHAIRWOMAN DALTON: Thank you very much; any questions?

DR. WOJTIW: Has the panel been selected for the public hearings?

MR. BUCHWALD: Not from what Alistair tells me.

DR. WOJTIW: Are you anticipating that this will be done in 1986?

MR. BUCHWALD: Well, all our planning is being done for 1986.

DR. KOSTUCH: How about the election; how will that affect that?

MR. BUCHWALD: I don't know. I am a civil servant, and I am being very civil.

CHAIRWOMAN DALTON: Can I call on Lub again for the report from the Nominating Committee?

DR. WOJTIW: This is the last item, I guess, for the morning. The Nominating Committee consisted of Shirley Henderson, Betty Hunter, and myself, and although we did not meet formally, we did have numerous ad hoc discussions, both on the telephone and in person. So the Nominating Committee has two positions that they are looking for: one was the chairman of PAC, and the second was the vice-chairman. I would now like to go to the process of electing of officers. The Nominating Committee are recommending that Bob Richardson be our next chairman of PAC. I would now like to open the floor for any nominations of any others; Bob has agreed to let his name stand in that position. Are there any other nominations from the floor? Second time, are there any other nominations from the floor? Hearing none, I declare that Bob Richardson will be the next chairman.

(APPLAUSE)

DR. WOJTIW: The second position was that of vice-chairman, and we recommend that Maryhelen Posey be the next vice-chairman of PAC. She has agreed to put her name for that position, and I now open the floor for any other candidate that would like to serve in that capacity. Are there any other nominations? Second time, are there any other nominations? Hearing none, I declare that Maryhelen Posey will be our next vice-chairman of PAC.

(APPLAUSE)

DR. WOJTIW: Congratulations to both members, and I believe that they will both do a very good job of representing PAC.

I would now like to ask Betty Hunter to say a few words on behalf of Bob Richardson who is absent because, I believe, of personal matters.

MRS. HUNTER: If I had known I was going to do this, I would have asked a few more questions of Bob about himself. Bob is a chemical engineer working for Gulf Oil in Calgary; I can't tell you how long. He has always been interested in environmental affairs, particularly environmental protection. He has been a member of PAC, I would say, anywhere from six to ten years; he can correct me, but that's where I put him. He was very active in the Red Cross, and still is. I should have mentioned first that he is retired now, which allows him to give more time to his special interests. I don't know whether he is still serving on it, but at one time he was a member of the Canadian Manufacturers Environmental Committee, as was another member of PAC, Bill Ross, who fortunately gave me the information. Bob, to me, is a man who will carry this association through its next year with a great deal of force and efficiency; I think we are very fortunate to have Bob as our new chairman.

DR. WOJTIW: Thank you very much, Betty. I would ask Maryhelen Posey to come and say a few words to our membership.

MS. POSEY: It is a good thing. I am here; the less you know about me, the better. I would like to thank you for the honor. I have a tentative letter of resignation prepared in case, but with Bob and the ECA staff, and all of you people, I'm sure it will be possible for me to survive the year, and I hope we are both happy with this.

DR. WOJTIW: I am sure you will do a good job. Thank you very much.

I would like to thank the committee again for helping me make the decision, and bringing the nominations forward. Thank you.

CHAIRWOMAN DALTON: That concludes the first part of the morning session; we will reconvene downstairs in the banquet rooms at 9:45.

DR. SAMIRODEN: If I may? Wallie Samiroden. I was very impressed with the high quality and the extensiveness of the work done by the different study groups, and I would like to apply all of them. First off, would you join me?

(APPLAUSE)

The next thing associated with that, I am involved with the Environmental Education Committee, and I think one thing that each study group should consider is some ways and means by which their findings can be publicized and made public to the different schools that could use them. I don't know what can be done now about it, but I think we should consider that.

CHAIRWOMAN DALTON: Thank you. We will see you downstairs.

(BRIEF ADJOURNMENT)

MR. KELLY: I am going to give you this introduction to the workshops, but before I do that, I would like to take this opportunity to thank all of you for your reviewing of the prospectus. Most of you only had the opportunity to look at the yellow-colored document; after the yellow-colored document, it went through a green document, and then an orange document. Ultimately it came out as the blue one, and the changes were largely based on the comments received from the membership. I would like to thank you all for that. If you want to take a look at the blue, you will find it greatly improved, based on your own comments.

Now for the workshops: they are going to be based on study groups, so we would ask you to go to the rooms for your study groups, and I will give you which rooms those are. For the Energy Study Group, it is Banquet Room B; for Environment Protection, Room 272; for NonRenewable Resources, it is the Conference Room, lower level, which was the press room yesterday, if you remember where all the cameras were set up; Pollution Study Group, Room 247; Urban Environment, it will be Banquet Room A; and Renewable is the Bubble Room; Environmental Education is the Boardroom downstairs where we hang up our coats just outside the door. The Science Advisory Committee, because of their different organizational structure, members of that committee can go wherever they feel they would like to.

You have all probably seen the questions and objectives for the workshops that are included in the kit. We are trying to keep these workshops practical, because during the coming year, you will be using the results of your various workshops for planning your agendas. I think these workshops are probably the most important session we're going to have, considering the future of the conservation strategy.

There are a couple of objectives that I would like to clarify just a little bit. Objective No. 1 says: "To avoid interference with the present agenda of any study group," and, of course that means to avoid any unwanted interference in the present agenda of any study group, but if you want to pursue the conservation strategy in your study group, please do so. Objective No. 3 says: "To identify information gaps necessary to evaluate present programs and policies." And the fourth objective says: "To provide a framework for each of the members of the advisory committees to express his or her ideas about the development of a conservation strategy for Alberta."

The framework is the workshop, where we are trying to provide an opportunity for you to express your ideas about development of the conservation strategy.

One other announcement: the Science Advisory Committee would like to get together over lunch to have a meeting. Do you have any questions regarding workshops? No? Okay, thank you very much.

AFTERNOON SESSION – Saturday, December 7, 1985

CHAIRWOMAN SNYDER: Good afternoon, ladies and gentlemen; I would like to call the plenary session to order. I, for one, am looking forward to hearing the results of the workshops; it looks like a lot of interesting things were happening, and so we should get right into them. I'm going to allow ten minutes for presentations, and three minutes for comments.

I would like to ask the facilitators if they will try to focus their report on the questions that were presented to them at the beginning of the workshops so that we have some kind of idea, so that all of us have an idea where we are going. I would also like to ask that the facilitators, when the session is over, that they please hand their report materials to Mike Kelly so he can have them to sort out. We have the same set of questions for all of the groups except the Environmental Education Advisory Committee, and they are asking a different set of questions. I would like to call on this group first. Dan Stoker, if you would come up and report on the Environmental Education Advisory Committee workshop, please. Thank you.

MR. STOKER: This was a little unexpected; I didn't know I was going to be first. Our group was a small group, but a potent group. I would like to thank Wallie Samiroden and Lois Fenna, Joy Finlay, and Archie for helping, in fact, really making it a good product, I think, that we have got here. I think I need to explain that the questions we dealt with were, as noted, different. We were asked to address five questions, and basically I can summarize those in five words: the audience, the ways, the time lines, the costs, and a plan. The approach taken was to do some brainstorming initially, but it was noted up front what the objective of communications are: to get the proper message to the intended audience in an effective manner within certain time lines, and with the budget available. And the questions that we were dealing with covered those five areas.

Regarding the message, it is not clear yet. I think we all know that, that it is not clear yet exactly what our message is, or messages are. As a rule of thumb, I would suggest we will work from the simple to the complex. For instance, I think one of the first messages we have got to deal with is in the form of a question, and I think we all read the brochure that is attempting to deal with it: "what is the Alberta conservation strategy?" People are going to have to know that.

I think the one that goes hand in hand with that is the second on the list, "why is it important?" What has to be brought out is that it is important and we have got to motivate people to be involved. Joy Finlay pointed out that we have to reconfirm people to get behind this, in that there are lots of people who are promoting energy conservation, water conservation, soil conservation for years, and some of them have fallen by the wayside. They had a strong interest; some of that interest may have waned. Their energies may have been zapped. We have got to bring them back. They are going to be the movers and doers, I think, and we have to entice them back.

The third question is: how to get involved. We have got to deal with that, how are we wanting them to get involved. The fourth, we have to invite and show them how to get involved, and maybe I am stretching the point at this time, but I am trying to make the point that we have got to go a long way to get people involved.

The second area is the audience, and we made a long list, if brainstorming is what you end up with, and I'm only going to point out a couple of aspects. We have identified a key group. It is not just a single group, but all those potential groups that can feed into Alberta conservation strategy draft documents; that is the next stage after the prospectus in the time line set. We are going to draft a document, and right now we are looking to ourselves to participate, the various PAC groups. But there are other groups: business, government perhaps; invite them in. They have got to be involved in the process early; we are not going to see the hearings for two years is the thought that we had, or maybe longer. That is a long way away, but it takes a lot of time to get them involved in the process. There are all sorts of groups: business people, industry, farmers, students, teachers, recreationists, government, and interested groups that Archie pointed out -- the non-Alberta audience. Making a hit elsewhere, by showing people elsewhere that Alberta is in the forefront, will help to push us along. Maybe we are a little egotistical in a way, but I think we will. We know we are in the forefront; I think we can use that to entice people to be involved.

Methods: there are lots and lots of methods that are possible. We had 18 sheets wallpapering our room, most of which were methods, such things as poster series, working through existing groups and using existing techniques like newsletters, et cetera, et cetera. We had 16 identified group areas which we can tap into that are waiting to be a part of this. There are existing programs established to get into schools. For instance, the Alberta Forestry Association has people already going into schools and confronting teachers and students, and we can bring in another message, we believe. We think this ties into the things we are already doing.

Surveys, tapping into curriculum projects on the school side, the ECA itself with its brochures and news releases. Something is going to happen at the end of this meeting, probably by way of newsletters, and that is one of the first communications activities that is going to go forth, the media, et cetera, et cetera. Regarding methods, we must not, I believe, and this is an idea from the group, miss out on the opportunities to use the Australian, New Zealand, and other countries' experiences. They have tried some methods already; some of them probably failed, and some worked very well. I think we have got to tap into what is working, find out what they used, and see if it can be applied here.

We looked at constraints; the dollars. We think the support of the ECA has them, and the monies will come forth if that's approved, and that will take us a long way. We can look for public service announcements in newspapers, et cetera, et cetera. We may have to go to additional funding, but I think we can get initial support from Alberta Access for the production of videotapes, or look to government agencies to have them incorporate the message.

An idea -- one that I think I will have to bring up through the steering committee -- is the possibility of setting up a charitable foundation to set up a pool of money. If we want to get into this in a big way, I think we're going to have to be able to draw from funds. Dollars are quite often the bottom line to make things happen.

We looked at time lines, and again unless somebody can give us some -- I think it is very important to know what our time lines are, and stage the development and work toward something. I think the hearings are the time when we should really be hitting in as many ways as possible of really bringing the message forth and getting the funds we want. But the real area of focus, the real priority area that starts practically now, is this solicitation of involvement in the production of a draft document. I was talking to someone who said that their group was floundering a bit because they felt it was so overwhelming, that where do you start. Well, we thought that you start by inviting people in, whether it is Esso, or Shell, or Alberta Environment, or all sorts of groups -- Cubs, Scouts, who knows -- and invite them to describe the things that they are doing now, to see what they are doing, and to maybe take a look at that in context, in the context of a strategy, an Alberta conservation strategy. So invite them to tell us what they are doing now, and in the context of a strategy, I think we are looking to maybe identify what they might be doing in the future differently. But out of that, come up with sectoral documents in forestry, in coal mining, whatever. The prospectus, the way it is now, is too big in some respects, and it is not specific enough to these various groups. What we need are sectoral documents created: what should the mining industry be doing to fit into this, what should business, what should the Chambers of Commerce be doing?

The EEAC will, in the coming year, solicit ideas from PAC, and we want your ideas. We will attempt to formulate a plan. We will invite communication and system experts to advise and get involved maybe in this, because we don't feel that we are maybe as competent as we should be. We are mainly educators, and we are leaning toward the communications side. We will make contact with other countries, and we are going to strengthen the EEAC itself to be a more productive group and to assist in our undertaking. Thank you.

CHAIRWOMAN SNYDER: We have about three minutes for questions or comments of any kind, if you want any. It looks like everybody is happy, Dan. There is one thing I forgot to mention to you a few minutes ago, and that is when you hand in your materials to Mike, if you would please put down the name of the study group from which these notes come so that they don't have to try to decipher where they came from, because some of the study groups have some similar concerns. So, please, put the names down.

I guess we are ready now for the second study group, which is the Energy Study Group, and Betty Paschen is going to report to us.

MRS. PASCHEN: My scribe went to consolidate my notes and hasn't come back yet. I'm going to use the notes that I made myself. We were a small group too, and as Dan referred to, a group that felt they were floundering away. We didn't flounder as a discussion group, but we ended up on a note that was almost overwhelming, and we felt that our task was almost beyond us. It required expertise that we didn't have, and, of course, all of the PAC groups are made up of volunteers from various sectors of society, and not necessarily experts in the field that they have chosen as a study group topic. So perhaps you will feel the same in that sense.

We did follow the questions. After a few introductory remarks by Kim, who helped us to focus, we discussed that there were quite a number of areas that we had already dealt with that would continue to be our focus. For example, we noted that we should look at the conservation of energy use in agriculture. Regarding the non-renewable resources, we felt that there were several different directions in which we need to examine those; for example, we should look at what strip mines do to the environment; we should look at the degradation of land by the oil drilling processes; we should look at alternatives that have sort of been put on the back burner to see how we can encourage the further development of alternate energy sources. We felt that there is much that could be done in more efficient use of energy, for example, in heating buildings, whether homes or large buildings, and industry. As much as 30 percent of energy costs have been saved at the University of Alberta, for example, by careful monitoring of energy use there.

We also felt that if in the transition period from the use of hydrocarbons to alternate fuels, if in that transition period nuclear power is used, it will only be so if there is a breakthrough in the handling of nuclear wastes, and one member felt that that would happen, so that is an interesting shot in faith. We felt too that the restoration to equal or better conditions that is the rule now in putting back, putting soil back into condition after mining operations, or oil drilling operations, has to be looked at flexibly, that at some times it turns out to be ludicrous. In fact it is better to leave hills where they are now than to try and flatten it out and to try to make it again into grasslands that it wasn't previous to the development. A certain amount of flexibility is necessary.

Under the second question under these broad topic areas, one of the most specific opportunities and problems our group could address, we thought that in coming here we would -- as I think you heard this morning in the report from our chairman -- we would look again and look further at the possibility of biomass. We would examine and try to encourage the further development of alternate fuels. We would do more in investigating the reuse of waste materials, and we would try to deal with this transition period that we are facing as the fossil fuels are being depleted, how should they best be used, what is the most judicious use of them while we have some left and what should be the role of the non-renewable resources as we go through a transition period.

I would like to invite any members of my group to add to what I said, because, as I say, the notes went off to be consolidated and I don't have them in my hands; if I have missed something of importance, I would like any member of my group to remind me of anything I have missed. Does anyone have anything further to say? Then that is it.

CHAIRWOMAN SNYDER: Thank you, Betty. Our next report comes from Dorothy Broadbent of the Environment Protection Study Group.

MRS. BROADBENT: The previous speaker lost her notes; I can't read mine. I'm going to be very brief. With regard to the first question, we have decided to devote our study group's time to ecologically important and sensitive areas. This is a broad overview; we don't feel at this time that we can go into detail. We need a lot more thought on this. So this is the answer to our first question.

The second question: in relation to the ecologically important and sensitive areas, we are going to look at public land policies, at the upcoming Recreation and Parks policy document which we hope will be made public this coming year, and we intend to react to that. We are going to continue with our wetlands, follow up on our wetlands resolutions, and deal with wetlands habitat and also critical habitat areas that include critical wintering ranges, which were felt to be very important by one of our members, and also nesting and breeding areas. Genetic resources is a broad heading. I'm not going to enlarge on it at this time, probably because I'm not really capable. And we also want to look at interface between tourism and recreation, and the interaction between many agencies and the statutory planning process. This means interacting at all levels of government, so that we can see if there is any interaction and how it works. That is basically our response to Question No. 2.

Number 3: we feel that we need information from the appropriate agencies such as Agriculture, Recreation and Parks, and Energy and Natural Resources. We need to know what we have in this province, our provincial assets. We need to know statutes of significant areas, and the types and effects of possible uses on those areas. We felt that we couldn't answer Question B at this time, or Question C; however, we did add D. It was felt among our group that the committees, particularly the chairpeople, are in need of assistance in assembling background information for meetings, and we also need help with communications, and we were wondering if it would be possible to deploy the ECA's resources to alleviate this problem. We were also wondering if any other study groups and chairpeople felt the same way as we did.

Question 4: we intend to use the present communication system of the sponsoring organizations to inform the group of our progress on this important topic. We intend to change the format of our meetings so that we make our speakers aware of our interest in the conservation strategy, and so that they will zero in and gear their talk to helping us with this important project. And like all the other groups, we intend to try -- although we realize that it is a huge task, and that it is going to take a long time -- we intend to support PAC in this endeavor.

CHAIRWOMAN SNYDER: Are there any questions or comments regarding Dorothy's question to the audience regarding --

MRS. BROADBENT: I would like reaction regarding that.

CHAIRWOMAN SNYDER: Would you ask the question that you had again for them?

MRS. BROADBENT: We felt that the committees, and particularly the chairpeople, are in need of assistance in assembling background information for meetings, and also assistance for communications, and we were wondering if it would be possible to deploy ECA's resources to alleviate this problem.

MRS. PARKINSON: Could you expand a little bit on what you mean by communications? Communication with whom?

MRS. BROADBENT: Specifically, letter writing. We hear the chairman has a horrendous job attending two meetings a month and letter writing; now with the conservation strategy it means gathering information and sending out information, contacting numerous government agencies; we can see this as being a horrendous job of letter writing to the different organizations, different agencies, and departments.

MRS. PARKINSON: Could the vice-chairman do half of it?

MRS. BROADBENT: One of the problems also we felt was that sometimes the chairpeople don't have the expertise. Myself, personally, I don't feel I have the expertise to approach some of these technical agencies, but the PAC and the ECA research staff do have that expertise, and could they be employed more profitably in helping us assemble this information rather than write the conservation strategy. It is really a conservation of resources, and I realize PAC only has limited resources, and we are very grateful to the ECA for allowing the research officers to assist with this document, but given the fact that the ECA has limited resources, are we deploying them to the best benefits of everyone concerned?

DR. WOODARD: Paul Woodard, chairman of the Renewable Resources. I understand fully what Dorothy is saying, and I support her wholeheartedly. I don't know how much support we can get -- I think it has been suggested before -- but I don't want you to stand up there, Dorothy, and feel like you are alone. I feel the same way myself. Perhaps maybe in the new year, the ECA staff and PAC and the Co-ordinating Committee can generate a better understanding and maybe some more co-operation, but I want you to know that I support you.

MRS. BROADBENT: Thank you, Paul.

CHAIRWOMAN SNYDER: Anyone else? I think that this is worth having the steering committee at least take a look at in their January meeting and see if we can find any ways to make the burden a little less heavy, so we will consider it at the steering committee meeting and see if we can come up with a way to help.

I think we are ready to move on to Bill Buchta and the Non-Renewable Resources Study Group report.

DR. BUCHTA: Thank you very much, ladies and gentlemen. I want to put a disclaimer on my report, and that is that I am speaking for five other people and some guests we had at our meeting trying to put their thoughts into my words. We found the workshops this morning to be a very good process, a very worthwhile process; its result was perhaps that we started planning this year's activities incorporating the strategic conservation of issues into those plans. I would like to state, though, that the conclusions we came to this morning have to be ratified by our whole group. We have a planning meeting in January, so we may decide to change track.

We dealt with two broad areas this morning. The second area was the questions asked specifically. The first area dealt with some more general issues. Under the general issues, our committee came to the conclusion that we supported totally the development of a conservation strategy for the Province of Alberta, and we committed ourselves to help with that process in whatever way we could. We also recognized the role of the prospectus. We recognized the fact that the prospectus will be further developed, and, in fact, will hopefully in the future end up to be a draft, and hopefully be then a conservation strategy implemented and successful, and we will be the pride of the world.

We committed ourselves to make a special effort this year, and I think our end point, approximately one year from now, will be to acquaint ourselves with the issues involved to a point where we can make significant, accurate, and meaningful input into any development of a conservation strategy. In addition, we recognized the uniqueness of the non-renewable resources group in light of conservation strategies; we had considerable discussion on this. When you look at the word "conservation," sometimes it becomes a little meaningless with respect to non-renewable resource because, by definition, I think, non-renewable resource means we can't conserve it forever, but sooner or later it is going to be gone. We can't sustain it too far into the future. Therefore, we felt that the approach we might take was not one strictly of conservation, but more of wise use of the resource, hoping that we can stretch it out to the point where a renewable resource can take over the demand for the non-renewable resource, and this might be one of the key ways that we approach it.

We also recognized that Alberta is a unique province with a heavy dependency on non-renewable resources, and it also has a great responsibility as supplier to the world. In fact, non-renewable resources is not specifically covered in the world strategy document; therefore, we have a special responsibility to explore that area very well and make some significant inputs into a strategy. We also recognized the need for our group specifically to be deciding its objectives and to be at some place at some time, and to hold to time lines and put some effort toward it.

The next part of the general discussion dealt with the mechanism of how we might do this, and that is where I think we throw our hands up in disgust and say, holy cow, this is a big job; where do we begin. But I think we started with a few good principles. The first thing we started with was the need to recognize that our workshop this morning was a beginning point in planning a strategy to get into a conservation strategy. There was a need, because of the significance of the conservation strategy document, for us to review all the areas we have dealt with in the past, and then reapproach them, probably with a conservation strategy specifically in mind. In the past, we have examined many issues, and the conservation that pertains to them has been part of the discussion, but very often a minimal part. So we had to refocus on things, and perhaps we really do have to reinvent a few rules and go back and redeal with some issues.

We also felt that it was appropriate to review our role and our mandate, and to define non-renewable resources, and to co-ordinate our definition with the other resource groups so that we don't get a conflict of boundaries, and so that together we end up being a group dealing with an issue and we have all the issues put together by the time we try to draft a document together.

Then, to more specifically develop a mechanism to review these things: we didn't get too far into that, but basically I think our approach would be to examine what is presently in place with respect to the use of non-renewable resources, and then to rather egotistically firmly state what we think should be in place, and then work towards that. By going through that particular, those two particular discussions, I think we fulfilled objectives in 1, 4, and 5 as much as we could today. Then we focused on Objectives 2 and 3, and specifically more on the questions that were asked of us. We will admit that we did not try to tackle Question No. 3. We felt that we had some groundwork to do in defining what we wanted to do first, and then look to answers to those questions. So we were not dealing with Question No. 3.

Concerning Question No. 1 and 2 right now, we tried to identify some broad areas of concern that we would have as a committee, not necessarily dealing with particular resources, but dealing with what we feel to be issues or concerns relating to all resources. This list may not be complete, but we did stress nine points this morning. One of the first points was that the main theme of our exploration might be that non-renewable resources be used wisely. The word "wisely," we did not try to define too much, but basically we mean using it conservatively and effectively, and taking the responsibility to make such decisions.

The second point, then, related to that was that the reason we wanted to use them wisely was that we have had a planned approach in rolling over from non-renewable to renewable resources for future generations.

The third point was recycling wherever possible; obviously by recycling particular things, like the oil drop program and so forth, we can stretch out our period of grace until we develop new mechanisms. We also felt, as a fourth point, that it was very important that we encourage the use of whatever technology is available to extend the availability of non-renewable resources, and you could even include things like automatic light switches such as on Star Trek, or door openers that make it so when you are in a room the lights won't come on, and they won't go on until they detect your hot little body heat coming back into the room; that was one example.

The fifth point was education, particularly of the public. We are the generation or generations, and our children are a generation, of blatant consumers of energy, and we recognize that it is probably impossible that -- that is not a reason for not doing it in the past -- to change the attitude and behavior of people, to try to get them to recognize that prudent use of resources is a very important principle. We also recognized the sixth point, that we felt that the political process was the main stumbling block. Political decisions are based on short term, based on political expediencies. We do not have a lot of hope for a resolution of this, but nonetheless we can't deny that something has to be done to get the public and government and all of us more aware of the need to do long-term planning in specific areas.

The seventh point was to identify any non-renewable resources that we can't see being replaced by present technology, because these require special concerns and intense consideration, if in fact they exist. And the eighth point was that we felt there was no such thing as defining strictly a non-renewable resource and a renewable resource. Put it in these terms; any resource that we classify as renewable nowadays may in the future become a non-renewable resource -- largely a matter of attitudes and our perception, but as an example, when my father was my age, I'm sure we considered oil to be a renewable resource; it was just a matter of finding another field. Now we know it is a non-renewable resource, and how long will it be now before we start to recognize that perhaps certain things like the Douglas fir tree might become a non-renewable resource if we get down that low. The human race is a renewable resource -- it is too bad, but it is that way -- but Bill Buchta is not; I am not renewable. So we have to watch that definition. My point is that even renewable resources have to be managed and we have to consider ourselves the custodians of them so that we do not allow them to become non-renewable. Now that doesn't really fall into our prerogative, but there still is that link that we have to consider.

Point No. 9: it is very important that we get regulations and legislation that are now in effect to be enforced. We then went on to discuss what particular resources we were referring to. Again, it is hard to define, but we felt that the oil and gas, the coal, historical and archeological sites, and certain minerals were certainly non-renewable resources and wouldn't be argued too highly. We felt that there were other issues, such as gravel. In our study group we discovered that gravel, in some circumstances, can be considered non-renewable. We have a big debate in our study group from time to time about the native peoples of Alberta, whether they fall into the category of non-renewable, and finally somebody said -- I think it was Ken -- what about other beautiful things, what about that mountain up there; it's certainly a non-renewable resource if it is torn down to get limestone out of it or something.

Anyway, when we discovered that there were other things that probably don't fall under our mandate, but we still felt they are non-renewable -- a unique ecosystem was one, for example, that is certainly non-renewable if you have a very small locale of indigenous plant life of one type and it is destroyed; it may be gone forever. Land use was another example, farmland being lost.

As I say, we did not answer Question 3 because we thought that question had to be answered in more detail, but we then went on to look at Question No. 4, mainly that of education. We recognize that there were at least four groups that we should be educating: one is the public, one is government, and one is industry, and the fourth group is other groups that are trying, or have tried, or have been successful in implementing some kind of conservation strategy, or doing work on it. This conference is an example where we have such communication, and we felt that that was an important fourth group to recognize.

We dealt mostly on education with our role as a committee, and we felt that as a committee we were obligated to promote, both inside our own group, groups that we represent, or other community groups that were involved, but also outside our sphere. We have to be knowledgeable. We were to some degree the advocates of this approach, and we felt that right now if you were asked to go out and do a little speech at a dinner meeting about non-renewable resources and the strategy to conserve them, we felt that we would all be very weak in our discussion. So, as an end result, we decided that at some point in time, perhaps one year from now, the members of our committee would be knowledgeable enough about non-renewable resources, and we would have an appropriate amount of written material or audio-visual aids, or whatever, that we could go out and speak to those and be reasonably intelligent about the issues. So that would probably become one of our subobjectives for the year.

To summarize, our group intends to be pro-active; we intend to make conservation strategy a major concern within our program this year, and I detected by the discussions this morning that it probably will be the underlying current of our meetings this year. We also felt that a year from now we want to be much more intelligent about the issues, and we want to be able to speak intelligently about them, and we want to be able to input any planning towards a draft document that might be initiated by that stage.

At this point, I would like to thank the members of our committee for focusing so well on the planning side of it, because I think that was a very important start to our year. I would also like to recognize the input of Alistair, Elmer, Ken, Gary, and everybody that dropped in, because many points came from their expertise as well. Thank you very much.

(APPLAUSE)

CHAIRWOMAN SNYDER: Are there any questions or comments? Actually Bill used up his comments time, but that's all right; we're ahead of schedule.

The next study group is the Pollution Study Group, and I would like to call on Brian Alleyne to come up and speak to that.

MR. ALLEYNE: The Pollution Study Group was a very combatative group, and we started off by first clarifying some definitions using war as our illustrative example. We tried to clarify to the satisfaction of the whole group what the difference was between policies, strategies, and tactics, using war as our example. Once we got that out of way, we attempted to follow the guideline that was provided to us to deal with the questions. And in general terms, under the first question, we felt that the most important topic areas were water quality, soil quality, and air quality, that is, that any conservation strategy would be compromised if these areas were not addressed.

What I will attempt to do next is to take each of these topics, that is, water quality, soil quality, and air quality, and identify the specific areas on each of them, and then point out the most pressing areas on each of them. Then I will take water quality as an illustrative example of the strategy we think should be applied in dealing with any one of the three topics.

So starting first with water quality: the specific areas we feel must be addressed are assimilative capacity, mineral fluorates, pesticides and herbicides, store water, waste disposal, tar and oil sands, sewage, heavy metals, toxics, feedlots, and excessive cattle to water. Under those specific areas, the three pressing areas are pesticides and herbicides, waste disposal, and tar and oil sands.

On the soil quality, we feel that the areas are first, soil sterilants; pesticides and herbicides, number two: number three, waste disposal (landfill); four, oil sands; five, tar sands; six, salinization; seven, nutrient imbalance; and eight, acidification. Again, of these items, the most pressing areas are pesticides and herbicides, waste disposal, and oil sands and tar sands development.

Under air quality, the items are acid deposition, issues like Lodgepole, issues like the Pincher Creek situation, tar sands, oil sands, vehicle emissions, other industrial pollutants, indoor and outdoor quality, heavy metals, and hydrocarbons. The most pressing areas under this list are acid deposition, tar sands, oil sands, and other industrial pollutants.

Then taking water quality as an illustrative example, the strategy we think should be followed is, first, there should be a review of water quality policies, and if we review water quality policies, the organization or the agency that could help us in addressing those issues would be the department, or it would be the Government of Alberta. We would look at policies from other provinces, we would look at policies for water quality for Canada, and we would look at water quality policies that are documented elsewhere in the world. Next we feel we should obtain an inventory of usable and unusable water sources that exist in Alberta. Information for this inventory should come from the Department of Environment, users of water resources, and other information sources that might be identified.

Next we think we should obtain an inventory of pollutants. The sources of this information could come from the Environmental Research Centres, from Agriculture Canada, from Environment Canada, from Health and Welfare Canada, from industry, and from the public. We did not answer the fourth question as outlined on the sheet, but we feel in general that the information should be disseminated back to the groups who represent.

In closing, we feel that in all those where we have identified this specific strategy which can be applied to our looking at water, or air, or soil, we cannot ignore the impact that political policies of food production and economic and other trade policies have on the practices, which can lead to pollution of air, water, and soil. Thank you.

(APPLAUSE)

CHAIRWOMAN SNYDER: Thank you. Are there any questions or comments? It was a very nice, straightforward, concise report. No questions on that? Okay, I guess the next group is the one I am most familiar with, since it is the Renewable Resources Study Group, and Maryhelen Posey is going to tell us what happened there.

MS. POSEY: I can't speak for the others; this is pure fiction. The reason it is pure fiction is we didn't think about the questions as such from the moment we started until Joan told us that's how I had to organize the report; this is the Renewable Resources Study Group all over. However, it turns out we did answer, quite by accident.

The first question: it was not difficult to identify the broad, important topics -- agriculture, including the land base; forests; wildlife; water. These are all land management issues essentially; they are clearly interrelated issues. For reasons too vague to be discussed, we were focusing supposedly on water, but our focus will be on those places where water use conflicts with specific other renewable resources, and we will be looking at conflicts between agriculture and wildlife in water management, conflicts between forestry and agriculture and water management and so forth. We seem to have been doing that anyways, and we might as well keep on.

We did discuss the necessity for us to consider what kinds of data bases are required for the proper management of water use, in particular, water use/land use interfaces, and discussed some routes for finding out to what degree that data base exists. That has to be explored much further. We do not intend to acquire a data base for ourselves -- let me get that clear. Appropriate speakers or resource people: this is where we took off. We are going to be pulling in, or trying to pull in, people to whom water is important in a context of their own. We are already decided for the first two meetings of the year, possibly three. The third one is the grazing lease sale. The first two, however, are going to be these water-use conflicts. We are going to be having someone from the irrigation district and a wildlife biologist, both at the same time, and they have to be civil with one another, or at least as civil as we are to each other, and we are going to have someone from the Department of Agriculture to discuss agricultural perspectives on water management.

Then we started brainstorming and we have come up with a list that is going to keep us going for at least the next two years. AOSTRA -- Alberta Oil Sands Technical Research Agency, I think -- Alberta Forest Products, Irrigation Project Association -- we are going to investigate whether CP are still involved with irrigation, by the way. We are going to identify one or more major food processors and bring them in; utilities, municipalities -- although we are going to hand that one to Urban and let them do it -- commercial fisheries, co-ops, recreation groups, and native groups, and obviously there will be a certain amount of consolidation to some extent. The various agencies have either shared perspectives or direct conflicts which we would like to be exploring with them.

As for personal contacts with people who might be useful to us, I made Paul stop because we didn't have room. That is not going to be a problem. This is very interesting that some study groups have identified a potential problem; we seem to have names popping out of everyone all over the place. Public organizations represented on the study group, as I said, particularly with the communications aspect of conservation strategy -- this was discussed. We were quite aware that our organizations are going to be responding to the prospectus, responding to the development of the draft strategy as we go along, and we were fortunately reminded by myself that the steering committee doesn't want to do all this at once, that it will be gradual, and we didn't have to decide on every little thing. However, normally we have someone from the environment protection study group fielding our questions; this time pollution was our topic, and that's all right. We have still some other people.

We came out with a direct proposal that at this time, before we go ahead with the far more specific and tailored approach that Dan was talking about, we solicit the assistance or the attention of the ERCB, and municipal affairs. We did this partly because they have already the expertise to deal with the document in its present form, and in addition, they are currently involved in the kind of long-term planning processes which must be involved in the conservation strategy. Thank you very much.

(APPLAUSE)

CHAIRWOMAN SNYDER: Thank you. Are there any questions or comments? I think we have only one more report, and that is from our urban study group. I would ask Bill Flook to come up and report on what happened in his committee.

MR. FLOOK: Madame Chairman, ladies and gentlemen, there were ten of us in the group, and we had the company of my old friend and colleague Dr. Jim Hackler, who joined us, and he was most welcome to sit in with us and he certainly contributed his share to the deliberations.

As a preamble to our work, we took a look at this and decided to reinforce and re-establish our understanding of just what it means, and just where it is now, and just where we are going with it in the future. We recognize that this is exactly what it says: it is a prospectus. It is now in its final stage; if it is approved by this plenary session, it will be released for free distribution, free and unlimited distribution, and so as far as that goes, it has come to the fullness of its time. The next step is only beginning. The next step is a process that will lead to the development of a conservation strategy, not a prospectus for a conservation strategy, but the strategy itself, and this will have to be handled over a certain period of incubation in the next several months, and we will all be a part of it, and the group agrees that it should continue to be a part of it as it has in the past.

Having said that, we took a look at the assignment that was given to us and decided to adhere to it in spirit, if not exactly to the letter. To give expression to this, we first of all did four separate things: first of all, we decided to recognize that from our point of view the most important thing that could be addressed by a provincial conservation strategy is the urban environment. That is obvious; it is our concern; it is our business. But it goes a little further than that. We took a look at the objective and the way it was stated in the prospectus, and discovered to our communal horror that we have an objective aimed not at the preservation of the urban environment, but at the preservation of our quality of life, and we thought that these two things were sufficiently different that we should rectify that presumption on our part and stick to the things that we were better equipped to address.

So with a great deal of trial and tribulation, we managed to modify our statement of Objective Five, and it now appears as follows. The most difficult thing in cases like this is to simplify things; you tend to add on rather than remove, and were it not for the maturity, the advanced maturity of two of our members, we would not have achieved this magnificent result. Our objective now is to maintain and improve the quality of the urban environment -- very simple and very direct.

The second thing that we did was to identify the topic as was suggested in the instructions we had, and determined that probably the most vital of the concerns that center around an urban environment were not appropriate to us at all; they were water and air quality. We certainly had no difficulty coming to that conclusion because we decided that if these things were lacking, they would kill us quicker than even automobiles could. We decided that that would have to go off our list and be diverted to someone who is better equipped to handle it, and I'm quite sure that the person who will do that will pick it up. Having done that, we identified five topics that we decided were of sufficient importance to occupy our attention and the attention of the people preparing the provincial strategy on our behalf in the next period of time, and they were as follows: as you might have expected, waste management heads the list; as you might not have expected, you hear us calling it "waste management." Having said my piece earlier when we were proposing our resolutions, I still believe that the term "waste management" is inappropriate; it has a negative connotation to that we ourselves, and I'm sure you do agree, find objectionable and counterproductive; we prefer to use the term "materials recovery." But in order to avoid a semantic joust with the people who will be concerned with us, we decided to go with the term we would understand so that our meaning could be obvious, and so regrettably we have stuck with the term "waste management" for the next short while.

The second is a question of noise; the third, the maintenance and improvement of the physical city -- I will talk more on these later -- the fourth is urban sprawl, and the fifth institutions and services. We determined that it would be inappropriate to try to break these down any further at this time; we would do this as we addressed ourselves to them, and will look at them in a more leisurely and more intense fashion, and will address ourselves to each of the subtopics individually. But we did spend a good deal of time anticipating the laxity of interpretation that may be placed on any of these short statements, and so we prepared to provide you with some short definitions of what we mean by each of them, and I will attempt to do this in turn.

In the matter of waste management -- or materials recovery, as I say we prefer to call it -- we believe that it has to start with the generator and he has to play his part. Then the community has to become involved and perform the necessary transportation, separation, preparation, and delivery functions that go with the management of waste. Finally, there has to be a private sector component that will avail itself of the inventories of these prepared and segregated wastes and turn them once more into useful products. This whole area is the area of waste management. We have got a handle on it now. We have made a start on it, and it is our firm commitment to continue with it, at least for the next year, and try to bring these ideas to some sort of fruition.

On the matter of noise, provided with the very able report and recommendations of the ECA on the subject, we are all very much aware of what are the most prominent and most pressing aspects of the topic of noise. In the urban scene, traffic noise transcends everything else and, indeed, the response to the presence of traffic noise is visible in many parts of the city today, particularly in the more recently established portions of it. But there are other aspects of noise that deserve attention, such things as noise in the workplace, which I don't think is visibly progressing at as great a pace as the abatement of noise in the cities. And then there are the health effects of noise, particularly the chronic health effects of noise that don't make themselves obvious immediately, but over long years of accumulation become evident, and are than essentially irreversible. Those aspects we intend to look at, and we also intend not to let go of our feeling that somewhere along the line, the provincial government has to be persuaded to accept the concept of a quiet communities regulatory agency of some kind so that quiet communities become a reality in the future, within the terms of the concept of quiet communities.

Maintenance and improvement of the physical city: we had a great time with this one because we stumbled over the word "infrastructure." Among our group there were some purists who had a very specific definition of the word "infrastructure;" we thought that what we were really trying to address ourselves to was the unavoidable and, at the present, apparently uncontrollable deterioration of the infrastructure of our cities. To avoid the ambiguity that is inherent in the word "infrastructure," we settled for a more colloquial and more prosaic term for physical city; this may not be a hundred percent accurate, but it certainly serves to determine what we are talking about. The reason this was so difficult was because under the umbrella of infrastructure, some of our members insisted that it was appropriate to include services and organizations, whereas others felt that the infrastructure was purely the inanimate physical mass of the city. And the difficulty that this presents to the urban environment is its inevitable deterioration and the failure of most cities to visibly keep pace with this deterioration. Whether it is caused by acid rain, the depredations of pigeons, or the impact of automobiles, they are deteriorating.

The next item, urban sprawl, is again a well-known phrase, and I doubt whether too many people have given intense thought to exactly how they would place limitations on what is or is not urban sprawl. When we tried to do it, we found it was a little bit difficult. But within the terms that we accept for the term "urban sprawl," we include all the results of the lateral growth of cities that extended aerial contents; that is aerial, the "a-e-r" rather than "a-i-r." So you see that is the sort of difficulty we have with this sort of thing. But what we mean is, as it spreads outwards and grows in lateral extent, a number of circumstances develop that are prejudicial to the welfare of the city and its occupants, and we propose to address ourselves to those as we identify them.

Institutions and services – and this brings in all the elements that our dissenting colleagues attempted to include in the infrastructure which the purists among us insisted we would not include in the infrastructure -- they have to do with such things as legal, educational, social, and recreational systems, as well as regulations, by-laws, and that sort of thing. We felt that it was inappropriate for us to identify subcomponents of these systems at this time. We felt it was equally inappropriate for us to attempt to determine how we were going to attack our studies, but merely to continue as we have in the past and identify our resource people, our sources of information as we found the need for them, and proceed to get them as best we can, or using the same methods that we did before. We hope and are quite certain that we will be able to continue to count on the able assistance of the facilities of the ECA to help us to do this.

That, Madame Chairwoman, is our report.

(APPLAUSE)

CHAIRWOMAN SNYDER: Thank you, Bill. Are there any questions or comments?

MRS. FELTHAM: Louise Feltham of the Environmental Protection Study Group. Bill, what I want to ask you is to elaborate a little more as to the urban sprawl. Now, by your initial definition, you are talking about urban items; to me when you're talking about urban sprawl, you are talking about something in rural context. Now, to me again, this is a municipal matter, a matter that has been dealt with in much more depth than any of us ever hoped to deal with it. It is something that should be dealt with maybe on a more comprehensive basis by both urban and rural, but definitely never alone by urban. The rurals themselves can't possibly find an answer. Then I find it a very difficult topic for any one group to possibly look at. I think over the last two days we have realized that basically most of the items that have been dealt with are rural in nature, because these affect all people in the province. We welcome this. However, when it comes to something like urban sprawl, that again affects the rurals to a major point of decision-making. I question its appropriateness for another body to even be able to attempt to answer the questions.

MR. FLOOK: I appreciate your comments, and I agree with a lot of what you say, but apart from the aspect of urban sprawl that impinges on the surrounding environment, that impinges on the rural areas and causes problems for them, there are internal problems that accrue to the city itself as a result of its spreading its borders laterally outwards. Such things as the extension of transportation corridors, the extension of utilities and sewage services, and that sort of thing do provide problems that are entirely restricted to the urban context and not at all impinging, at least not primarily impinging on the rural surroundings. There is a basic concept that you gave expression to where we hardly agree, and I nearly neglected to mention it in my initial presentation, but that has to do with the basic concept that underlies all of the things that we attempt to do, and that is that none of them essentially within the context of an environmental study exist in isolation, that every bit of it, including the urban environment as such, is also a part of the overall larger environment and has to be looked at in that context. We fully intend to do that, but not, in the case of urban sprawl, be concerned for instance with the pre-emption of agricultural land. That is a topic on its own. It is a result, in a lot of cases, of urban sprawl, but it is not the kind of result that we are concerned about from a purely urban concept. Does that answer your question?

DR. SAMIRODEN: Wallie Samiroden. You make reference to Objective No. 5, and I am suggesting a further deletion or revision to it. I see a certain inconsistency with the use of maintain and improve. I don't think you can do both; in some cases I don't think you want to do both.

MR. FLOOK: I disagree entirely. I am absolutely certain that we can and will do both.

DR. SAMIRODEN: But do you want to maintain certain environments?

MR. FLOOK: Yes.

DR. SAMIRODEN: Well, then, if you want to maintain them, you might not want to improve them.

MR. FLOOK: You might want to maintain some. At any given point in time you might be devoting your efforts to maintaining some aspects and improving others.

DR. SAMIRODEN: Okay, then, if you don't accept the revision, or the deletion, then I would suggest the revision "maintain or improve."

MR. FLOOK: No, we intend to do both, and our intention is to give everyone the clear understanding that that is what we aim to do, to attempt to devote ourselves to ideas and recommendations that will have the effect of maintaining and improving. I insisted on this for a very basic reason, and if you will give me an opportunity to do so, I will philosophize for you, which I will do now. As the apologist for the urban environment, I feel that it has the unique position in the environmental scheme of things in that it is the predominantly human environment. I am very much concerned, my group is very much concerned in our preoccupation with the preservation of habitats for a number of species that are non-human. As desirable as this objective would be, and indeed it is fully desirable, we tend to pay insufficient attention to the habitat of the species that should concern us most. I believe that we should reverse this trend and place that emphasis squarely where it belongs, to the habitat that is occupied by Homo sapiens. That is the basic underlying principle.

The other thing is this, and this is where we cover the basis of maintaining and improving: it seems to me -- and some of my biologist friends have told me already that I am wrong, but I don't agree with them; I prefer to remain in my ignorance until somebody hits me over the head with a two-by-four and gets my attention -- I believe that in the scheme of things, the kind of habitat that produced ducklings in the year 200 BC can still produce equally healthy ducklings today, if nature had been allowed its own course. Now, we have interfered, and so that is no longer valid. But, assuming that we had the ideal situation where nature is still allowed to take its own course, we would be reproducing equally healthy and happy ducklings today in exactly the same kind of habitat, but we would not be still producing equally healthy and happy human beings today in caves or out in the open plains, as was the case thousands of years ago. The human being today demands and requires a very different, a very changed habitat, and I am quite convinced that two or three hundred years from today, the people who will be living in our cities will look back in horror and wonder how in hell we ever lived in Edmonton in 1985. This is why I feel there is an importance on improving.

DR. SAMIRODEN: Why do we want to maintain that in the objectives?

MR. FLOOK: Because the maintenance part of it is a counteraction to the deterioration, the uncontrolled deterioration of the infrastructure that I was talking about earlier. You see, you are on a downhill grade now, and you have got to run a little faster just to break even. That has to be the first aspect; you have got to prevent yourself from slipping back. That is the maintaining part of it, and then move forward from there. You can't do the second without the first, not as I see it, anyway.

DR. SAMIRODEN: I just felt that improved meant that you're starting from a point and moving forward.

MR. FLOOK: But you are starting from a slipping point. There is a hole in the bucket and you are trying to fill it.

CHAIRWOMAN SNYDER: Any more questions? Thank you very much, Bill. We haven't left anyone out, have we?

I would like to, at this point, give a special thanks, not only to the facilitators who did a fantastic job of summarizing some very complex ideas for us, but also to the PAC members themselves who have put weeks and weeks and months of energy and time into the prospectus for conservation strategy at this point. They have done an incredible job, and it shows today from the results of the workshops. Finally, I would like to thank the staff of ECA who have put in a great deal of time, especially two people who have put a lot of work and energy into making it possible for us to have this weekend, and I would like to give everybody a big hand.

(APPLAUSE)

I would now be interested in entertaining a motion to accept this prospectus.

MS. SLOAN: I so move, Madame Chairwoman.

MR. KURE: Seeing as how I have a mike and the other voice doesn't, in addressing the Chair, I would say that the steering committee discussed the matter of progressing to the point that we are now, and at this conference, and therefore I have a motion, Madame Chairperson, that the prospectus document as presented to this meeting be adopted by the annual joint meeting as the basis for the development of a conservation strategy for Alberta, and I would be prepared to move that motion.

CHAIRWOMAN SNYDER: Thank you very much.

MS. SLOAN: Then I would be prepared to second it.

CHAIRWOMAN SNYDER: All right, we have a mover and a seconder. Elmer, did you have something else to say?

MR. KURE: I think it is appropriate to say maybe a few words because of the very dedicated efforts that have taken place here. Obviously most of the words have been said here either by our very excellent panel yesterday, or by the people from the forum and committees. However, I think what we have seen now in the blue-covered document is the application of a philosophy, and this philosophy should help us develop into the next stage that we now all recognize needs to be done, carry us into the transition period probably, because we have the lead time in this province to do it. It should give us a chance to look at practicing what we have become very good at, and that is preaching to others. Obviously no Third World country could be expected to, I think, respect the views of a country or province that did not practice what they preached. Obviously there is an obligation there for us, and you certainly give us the opportunity now to proceed with that. I think to most of us now that it may be possible to harmonize ourselves in this province, and that challenge is still before us. I certainly think that the conservation strategy and the philosophy and the prospectus form that we have adopted here will give us an opportunity to secure our future, and probably the quality of life that Bill Flook was talking about. I certainly think as well that this group has now taken a lead and has agreed to take a hand in the changes that we see must be made, at least the change in our destiny and those that come after us -- in the words of David Munro yesterday, a chance to stop discounting our future.

Finally, I suppose that the document before us is not much different than other policies that we were aware of, because it is merely a philosophy, but it does give us the opportunity to promote the application of a strategy in this province. I hope, and I'm quite sure we're going to be successful, particularly after the workshops and seeing the efforts and the dedication of everybody here. Everybody said we are going to do it and we are going to do it with the expertise that we have. The ones we don't have, we will find. Thank you.

CHAIRWOMAN SNYDER: Thank you. Do we have any other comments?

DR. ROSS: Bill Ross, Energy Study Group. I guess I had better be more complete: William A. for Alexander; A, that rhymes with K, and that stands for confusion. I want to make clear first that there is no doubt in my mind that I support the motion, but I am an academic and I tend to be critical, so I will raise what I think is a substantial concern with the document as an Alberta conservation strategy; and that is that it flows carefully, and indeed well, to the World Conservation Strategy, which does not deal with non-renewable resources and their role in a sustainable economy. As we all know here, Alberta's economy is based very substantially on non-renewable resources, as was identified not only by our study group, but also by the non-renewable resources study group, and as a result, that particular section is weak. Now I don't mean to be critical of it, because as Dr. Munro I'm sure will indicate, there is a good reason why the IUCN with its very extensive resources available to it over a four-year period chose to avoid this very, very difficult issue. And my big concern is that there needs to be some substantial improvement in that area in order for it to be a viable conservation strategy and to be adopted by, for example, the Province of Alberta.

Some of the concerns were mentioned earlier by the Non-Renewable Resources Study Group; they include the role -- or, I guess first of all, how long a time period do we mean when we refer to a sustainable economy? Are we talking about sustaining in perpetuity, or merely for a millennium, or merely for hundreds of years, or are we talking about getting us through to the next election? I think that that is a very substantial issue in terms of how long is renewable versus non-renewable resources. There are issues of how viable the use of non-renewable resources are in a sustainable economy, and the answer is they are clearly viable. They simply must not be relied upon in perpetuity, or else the economy is doomed.

And there are further questions about substituting for non-renewable resources when one passes from time period to time period. There is no reason why one can't substitute for one set of non-renewable resources another set of non-renewable resources; again, it's the same kind of criteria, provided they meet certain criteria in terms of making the society better and more viable in the long term. Those issues are not explicitly dealt with in the prospectus, and I would wish to raise that as a concern. I also want to alert the ECA and the various study groups to the potential difficulties of trying to address these questions superficially, because I think that these may end up being nothing more than a lightning rod with which to attract criticism of the strategy. Having said that, I guess it will take a lot of work on someone's part, and I'm just not sure how we will be able to remedy these concerns, but I do want to raise them. I certainly will vote for the motion -- let us be clear about that -- but I wanted to raise those concerns that I have.

CHAIRWOMAN SNYDER: Thank you for your comments.

MS. POSEY: Just a quick comment on that. I would like to thank Bill for the kind of vote of faith he is offering, to support the document in spite of serious concerns, but for a general -- particularly for those of us who have not gone through it quite as carefully as Bill has, this is not the conservation strategy. You have to remember that this is an outline of where we think we have to go to get a conservation strategy. Certainly those of us who are not on the non-renewable resources study group and are terrified of trying to deal with the issues recognize how difficult it will be to incorporate these concerns of Bill's into a draft conservation strategy, which would be the next step, but that it has to be done, because living in Alberta we don't have a choice. So I think the weaknesses are partly weaknesses based on facts. When you do an outline, some sections of that outline have to be more thoroughly developed than others because of your knowledge base, your understanding of how to approach some of these questions. The others are simply the ones that we are going to have to work harder on in the next few months.

CHAIRWOMAN SNYDER: Thank you. Are we ready for the vote? All those in favor of accepting the prospectus for conservation strategy, raise your hands.

(SHOW OF HANDS)

Opposed?
(NONE)

Abstentions?
(NONE)

(MOTION CARRIED UNANIMOUSLY)

Thank you once again for your participation and help in this effort, and I think that Sheri has something to say.

DR. DALTON: With your permission, and considering the fact that we only have two resolutions to deal with this afternoon, we would like to move to the resolutions part 2, and in the absence, at least as far as I know, of Lub at the moment, Martha is going to chair this session.

(RESOLUTIONS published under separate cover; they are available from the ECA Library)

EVENING SESSION – Saturday, December 7, 1985

MR. SURRENDI: Thank God, as time goes on one becomes mentally prepared for other things in life besides violence. I made the gross tactical blunder of bringing notes of this whole thing, and maybe I probably should have left them at home, but by the time I get finished, I will throw them away anyhow.

Ladies and gentlemen, Mr. Chairman, and honored guests, I have to confess I am a little bit ambivalent about being asked to stand up and address such an august environmental body; my attitude ranges throughout the week from absolute excitement at being able to express some points that I possibly would come up with -- at least I thought that -- and of course it would then take a downturn and I would end up with this gut-wrenching fear of not having any points to make. I finally realized that essentially my fears were not entirely groundless, but I thought that I could probably handle them. I rationalized myself out of these fears by reasoning that I have had to be somewhat innovative in how I made my living during the last few years, being essentially outside the direct government circle of environmental people and wildlife people. I had to make my living while still being slightly involved with the environment, because that is where my training lies. Fortunately, that innovation capability that I have has kept me at arms-length from the environmental aspects of the government and what have you, and it has put me in a situation where I have been able to observe the general environmental scene while being and becoming involved with people from the financial and industrial worlds.

Some of these people that I have met have also been reasonably innovative in nature, and between myself and some of the folks that I have worked with, we have been able to turn at least one major environmental problem into what we hope will be a substantial source of jobs and income during the next six-odd months. We have done this by producing a solution for this problem. I am going to digress just a tad here. In my scanning some of the literature that I was provided with before the meeting, I went through the annual report from 1984, and your Executive Director, Alistair, says that when jobs are scarce and revenues are falling, plausible arguments are often presented to indicate that development is being held back by excessive environmental safeguards and the overenforcement of environmental standards. It is even possible that some portions of this argument may be true, but problems, environmental or otherwise, are frequently an opportunity in disguise. The solutions to such environmental problems may be a basis for new industry which requires numerous personnel with various levels of technical training, so it can be exported to other countries where similar problems exist. I am just going to discuss one or two of the projects that I am involved with to give you some ideas about what I am talking about, and for those of you who were here a year or two back, you may remember that I casually mentioned that I thought that there were more opportunities around than perhaps we were taking advantage of.

I have two partners in the business that I am involved with, one of them is a fairly well recognized expert in the field of plastics. My other partner is an investment banker; I think that is what he calls himself. Neither of these two people knew each other before I came onto the scene, but I knew both of them, so when the plastics expert came to me and said "I've got a couple of really good ideas regarding the recycling of plastics; do you think you know where I can get some money," and I said "Well, give me a half an hour and I will make a phone call or two," and an hour or two later we had lunch set up. On October 5th of 1984, the three of us sat down at a lunch in the Edmonton Club downtown, and by that afternoon we had essentially ironed out the rough edges on a deal that would put the first plastics recycling research facility into western Canada. We have now established this building, and we have moved a bunch of our equipment in. So we have on hand, in fact, our first plastic recycling research facility, and we believe that it is the first in all of Canada. It is certainly the largest in North America, and perhaps the most up to date as well.

Looking through the documents that were provided for me, I saw that one of the resolutions dwelt a little bit on the recycling aspects of waste products, and I think that this kind of thing fits perfectly into that particular vein. We expect to employ somewhere around 200 people in the plant, and we expect to recycle a variety of different kinds of plastics currently being collected, those being the polyethylene pop bottles, and the various kinds of pesticides and herbicide containers. We still have to do some cleaning up of these containers, but nevertheless, we think we have a market for the product, and we think we can do something with the contaminated wastes, and we will be working with the governments of at least the three prairie provinces and the Feds here to help us get this waste product cleaned up.

So, rather than go the conventional route, we thought that this would be the way to establish a new industry in this area, and we think we have got it off the ground. In fact, we would like to gather some of the people in this august body three or four months from now and give you a guided tour of our plant when we are in full operation.

One other project that I'm working with, and to a degree the partners have to remain somewhat anonymous, is a coal upgrading facility for western Canada. The technology is coming from the United States, and again it is through old university contacts that I made. We were looking to upgrade the quality of western coals to eliminate water, pretty much eliminate ash and sulphur and come up with a coal that is twice as hot, stabilized at one percent water level, and we can accomplish this at a very low cost. So we feel that we will be able to very nicely attack the acid rain problem in western Canada without the vast expenditures required by companies in these areas to establish scrubbing units and manage the sulphur scrubbers. We think we can compete with this product of ours, even with the transportation costs involved, and we look to be active in this area probably within the year. It is surprising how long these kinds of things take to get off the ground, and it is amazing to find the kind of reticence that you find and the skepticism in the eyes of various government people and in the industry, and bankers in general, when you bring these ideas in. It takes a while to get them off the ground.

Anyhow, I thought I would just like to bring this point up because I believe that a number of the environmental problems that currently exist, not all of them, but certainly some of them can be regarded as opportunities in disguise, and should be regarded as a potential for jobs rather than as something that can't be surmounted and everything has to stop when you bring these kinds of operations into being. Rather than being regarded as a liability in times of economic stress, the applications of stringent environmental safeguards should perhaps be regarded as an area where the economies of provinces or countries can actually be expanded in such times. It is in this area that we think we can create new high-tech jobs and industry, and we are in fact moving in that direction.

North Americans in general and Canadians in particular have suffered from delusions of grandeur, essentially regarding the amount of space and land we have as infinite. Simultaneously we have suffered, I think, from the astounding naivete in business negotiations. We assume that unless we allow industry such as the kinds that I'm working on myself, or agriculture, or forestry to use the general environment as a free disposal area, they will take their jobs and business and go elsewhere. There is a lot of flak about this kind of thing, but I truly believe that most of these issues are in error. It is obvious today that productive agricultural land is at a premium, as is fresh water. We have come to realize that squandering such resources can't be tolerated if you wish to retain a healthy environment.

As for the value of industry to any area, it would be interesting to compare the opinions of people from the Love Canal area or from Bhopal, say, 40 or 50 years ago when some of these industries moved into the area, with the opinion of those who recently lost their homes and their livelihood and, in some cases, their health and even their lives to this contamination. The conservation of a diversity of habitat that is not just good for a few species of game or birds, it is the buffer which maintains a healthy environment purifying both the water and the air, is absolutely required. Therefore, efforts must be made to maintain what we have left. Fortunately, the true saving grace of our situation is that, while habitat diversity is easily destroyed, it can also be recreated with the specific situation that Ken Sumanik talked of yesterday when he utilized several examples that very clearly demonstrate that even by accident occasionally we do create some areas that are useful for fish and wildlife; surely we can do it on purpose.

Nature is truly resilient, given half a chance. We as citizens must become less of a pushover for both government and industry when it comes to eliminating or simplifying the environment. We must become flexible and innovative in our approach to solving environmental problems, and astute in our negotiations with both government and industry. We are faced again and again with the moral dilemma of the starving millions; this plagues us in spite of the fact that we have made serious efforts to feed these people. Our methods have succeeded in producing for us vast surpluses of meat and grain in the short term, but they have cost us dearly in the depletion of the resources of our soil and water. We can't keep up this pace, because we are destroying our production facilities as surely as those whom we are trying to help have, over time, destroyed their own. This habitat destruction has almost always been accomplished with good intentions and, during this century, it has oftentimes occurred backed by our advice, technical assistance, and funding, There are those here who may think I exaggerate a little; for them, perhaps we require a guided tour of the agriculturally induced and continually expanding salt flats in southern Alberta. A trip to the newly-created canyon country of the Peace River-Grande Prairie area, where highly advanced and unilaterally initiated drainage practices have occurred, should also be required. Many of the projects that I saw up there are not licensed, and you couple this with a lack of desire or willpower to enforce currently existing legislation in such areas, and we end up losing cubic kilometres of highly erodable soil every year. Perhaps we can change it into a tourist attraction something like the Grand Canyon area or something. When you are standing there looking in amazement and disbelief, remember that clearing, draining, and land-use practices which have resulted in this mess are essentially being paid for using your tax money.

The word "conservation" and "conservationist" are regarded occasionally with some reservation because they are frequently used in the context of eliminating habitat. For example, conservation is frequently used by those involved in the drainage of wetlands; this term is almost invariably juxtaposed with the word "reclamation," where the land being drained is said to be "reclaimed," although we never claimed it in the first place. This kind of conservation is also accomplished using tax dollars. The unfortunate and glaring facts are that in spite of the cost-benefit analysis based upon how much land can be drained and turned into agricultural production by such drainage, no one really knows after the fact how much has actually been drained, nor how much of the drained land has been turned back into agricultural, save for some of the figures that the Canadian Wildlife Service has put out that I noticed in your wetlands statement; there was a statement made in that article that 61 percent of the wetlands have been lost at this point. I suspect that while the Canadian Wildlife Service has made a valiant effort, those numbers probably vary 30 percent one way or the other. Nevertheless, the agencies that should know how much has been drained, noticeably agriculture and water resources, unfortunately don't, despite the fact that they justify their drainage on the basis of cost-benefit analysis based on how much land had been drained for X number of dollars.

Record numbers of landowners, farmers, stockholders have gone under during the past three years, and our agricultural department is still striving to increase the agricultural base of this province by the traditional means, those being clearing large areas of northern bushland, and the expenditure of hundreds of millions of dollars to either drain lands or to enhance irrigation. All of this is occurring at a time when world markets are glutted and Canadian farmers are unable to sell their produce for more than it cost them to grow. Can any of you tell me the name of another industry where cost-benefit analysis does not require as fundamental a market for its products, and the requirement that the product must be sold for more than it cost to produce?

It is natural to be most familiar with the environments closest to home. We are all aware of the enormous problems caused by habitat degradations and destruction of places like Ethiopia and the rain forests of South America, but we had best be prepared to start closer to home, and we need not look any further than our own agricultural industry and its negative influence on both land and water base and on the farmers themselves. This negative influence is in direct response to myopic, simplistic and non-innovative policies, produced and promoted by policy makers who have apparently not yet learned that more is not necessarily better. In fact, right now for farmers and ranchers who continue to hang on, in spite of market situations which can demand prices lower than what it costs to produce the products, more, especially produced by government-subsidized competition, is unquestionably worse and will undoubtedly lead to still more foreclosures and bankruptcies.

It is clear to me at least that we as concerned citizens must be prepared to contest such policies, and it must be done enthusiastically. The environmental costs in both habitat and water quality are either not included or dismissed as too low to worry about. The cost to the agricultural community in general is, and will continue to be, high in bankruptcies and receiverships, because those farmers just hanging on are not capable of competing with government-subsidized competition, in the case of world markets which can pick and choose and thus drive down the commodity prices.

There are other problems of a more direct nature. These are also market-related but result in more direct threats to the life of wildlife, both those that are rare and endangered and the regular common species that we have around. International trafficking of animals, live, dead, or processed, is currently epidemic, and almost entirely illegal, but a great deal of money is being spent unscrupulously by businessmen, not just in Canada and North America, but worldwide. This activity is having an adverse effect on a variety of animal species through the world, and will result in the extinction of many species unless it is curtailed in some way. To accomplish this will require both skilled police work and forensics, as well as a highly co-ordinated worldwide effort on the part of people like ourselves.

Do I believe that we need a Canadian conservation strategy and a worldwide conservation strategy? You bet I believe it. I am also convinced that we need an Alberta strategy; in fact, the closer to home, the more directly we can apply a lot of the things that are a little more nebulous as you become broader in your scope. I am convinced that this strategy must be prepared to engage the entire spectrum of problems, and we just basically tapped on a few examples. I haven't alluded to very many. I will give you a couple where I think we can have some influence right here. One of my suggestions would be to make a complete study and review of all of the cabinet committees that exist under the current government structure. It has not been unusual during the past four or five years, for example, for major policy initiatives influencing the use of public lands and water to have been aired unilaterally by cabinet ministers or cabinet members, much to the chagrin of their colleagues -- such items as the agricultural land clearing in the north and the Paddle River Dam, and now the prospective sale of Crown land currently to private landowners. These kinds of initiatives clearly demonstrate to me, especially when they are done and brought out in the open, and then all of a sudden everybody in the government sees what's happening and says, man, when did that come about; I didn't know anything about it.

It is clear that what we need is a cabinet committee that is strictly a land-use committee through which all of these kinds of initiatives have to be brought and aired before the public before they are passed as a regulation or a law. It is a tremendous weakness in our government, and it is mostly because they haven't done anything for the last 40 years about changing the cabinet committee structure.

Another problem I think we have is that our urban MLAs, generally speaking, don't take much interest in what happens in the rural communities, in rural development. The unfortunate problem there is that the bulk of the clientele from which the rural activities draw their, well, draw their clientele from, I guess, are urban people. Urban MLAs must take a more active decision-making role in what happens to publicly owned resources in rural settings, because the bulk of the use comes from their ridings.

I probably missed a great deal of examples that illustrate the need for such strategies, but I feel that my point is clear. I am most enthusiastic about the subject matter and the discussions that took place during the last two or three days; the issues discussed clearly indicate that while most of us have started out from different fields, we have, generally speaking, arrived at the same conclusions. The bottom line is that we need a strategy definitely. I think that the only people who really can get this thing off the ground, in spite of the problems that they may have, or the shortcomings they may have, are probably those of us in this room, because we at least have realized the significance of the shortage that currently exists in this area. I say the bottom line is that a great deal of work must be done, and we are undoubtedly the ones to do it because we thought of it first.

With that, ladies and gentlemen, I think I would like to leave you, and hope that I have left you with something to think about. Thank you very much.

(APPLAUSE)

MS. POSEY: I'm sure I do better without the microphone, and I'm sure Carl will entertain questions.

MR. SURRENDI: You bet. The one thing I have to clarify at this point, is that of course my name is Carl Surrendi, not Dennis, and while we may think a lot alike, I am in no position to speak for him.

MRS. PARKINSON: When you talk about reclaiming plastic, is there any hope of being able to do something with styrofoam cups?

MR. SURRENDI: Well, we have to start somewhere, so we are starting with the most obvious, but those are the plastics that are currently being collected in the collection facilities. We will hopefully drift from there into the oil bottle collection, the lubrication bottle collection; we are going to be working with the oil industry on that. The governments in general are collecting pesticide and herbicide containers, mostly because they don't know what to do with them, so we are in a position where we think we can help them with those. It is not so much a question of what we can do with them; we know we can do something with them if we can get quantities enough to make it an an economically sound business venture. So what we have to do is devise a collection capability that will allow us to get enough of this stuff to make it economically viable, and I suggest that if we can do it with the others, we can probably do it with styrofoam cups.

MR. FLOOK: Carl, you have given me an opportunity to take advantage of what you are saying. Everyone in this room knows I am a great proponent of acquiring an inventory of separated materials. Do you agree with me that the mere presence, the mere existence of inventories of separated materials will provide an opportunity for entrepreneurs like yourself to take economic advantage of them?

MR. SURRENDI: It certainly has done so for us; we clearly saw the advantage when the plastic, or the bottle collection depots began to collect these things. There are uses, apparently, for the various kinds of glass, but the plastics in general, in spite of the fact that we import practically all of it from the States, are still crushed and sent to the garbage dumps.

MR. FLOOK: If we can get Edmontonians and Calgarians doing what I call separation at source, what we call separation at source, and providing you with these visible inventories of raw materials, you will make use of them to recycle?

MR. SURRENDI: I would think so. I would think that that is the first step.

MR. FLOOK: You are getting it from the horse's mouth.

MR. SURRENDI: There is no question in my mind that we are prepared to step off into an extremely expensive venture, and we have got a lot of money tied up in this thing because we think it will work.

MR. FLOOK: Thank you, Carl.

MS. POSEY: We have to have a question from Alistair so that Ken can have a photo opportunity.

MR. NELSON: That's right.

MR. CRERAR: Well, I always rise to a challenge. One thing, Carl: I squirmed a bit when you were talking about -- well, almost as if agriculture was a problem industry. It is, but there are two agricultures out there, one very prosperous and self-sufficient and capable of standing on its own feet, and at the same time, there are those who are on the margin, who are going to fail and are creating all kinds of problems. Our difficulty arises when we confuse the two different things and try to put a label on the whole thing because part of it is a problem. I would like you to comment.

MR. SURRENDI: I would be prepared to say that yes, you are right, and I am being too generalized in our approach, Alistair, but I would put this challenge to you: if agriculture had not moved into this country and we had a hundred million buffalo running around here right now, do you think we would have 10,000 acres of salt flats being created every year in southern Alberta? And I guess that is when the bottom line comes out. I have real strong feelings about this, you understand.

MR. CRERAR: I can appreciate it, and I also know that we have a place just south of Fort Smith and north of Fort Chip where you have 5,000, 6,000, 8,000 animals running free, and it is a most magnificent thing to see. Do you know how many people in total go to view that in a year? Seven hundred and eighty-seven last year.

MR. SURRENDI: I understand what you are saying. I guess what I am saying is that if you want some real lessons in how to run a large-scale operation, I wouldn't waste my time going to agriculture. If you want to see how to run large land operations, go to Last Mountain Lake; go to Mallard National Refuge and look at what the wildlife people have done. They have increased the agricultural production manyfold in those areas, as well as the wildlife production. And I can assure you that had it been in the hands of agriculture, it wouldn't be the same way; in fact, it was there to start with, and that is why it was given away. And I guess I have some real -- somebody has got to show me; I am from Missouri. Now on this agriculture, it is too myopic. I find it difficult to understand why any group of researchers would spend hundreds of millions of dollars trying to increase the ability of a Hereford to gain an extra pound from a hundred pounds of wheat when a buffalo will gain a pound and a half without touching him on the same feed. There is an innate lack of economics in the whole thing that just eludes me. That is something that somebody around here has got to still -- I've asked that question around here a hundred times and there isn't an economist alive who says, yes, we considered the market and we think we can do it because of this. Every economist I have ever talked to about agriculture has said, well, we assume that we can sell it. It's like assuming you have got a can opener when you are on a desert island and you've got a can of food. I haven't seen it yet. I'm going to be around to ask that question a lot of times until somebody comes along and answers it for me.

DR. WOODARD: Do we as a society not have a moral obligation to subsidize recycling?

MR. SURRENDI: I would like to think so, and you understand I have a vested interest.

DR. WOODARD: We don't do things unless it is to our economic advantage; unfortunately that is the way we think. We have got on the one hand tremendous pressure not to recycle, to waste, to sort of replace them, and until we change around and make, say, pop bottles worth a dollar each instead of, what are they now, five, ten cents, we are not going to get things done. Until we sort of subsidize ventures like yours and say as a society we should be paying you to pick up our plastics, and somehow we are suffering a financial penalty, then we might feel that that is the only way of sort of turning the cycle around.

MR. SURRENDI: My instinct regarding the plastics is very strongly in favor of that sort of thing, but again until something becomes a problem, it's probably -- you know, there are those of us who see a problem coming and get up and wave a flag, and occasionally somebody else who has money or the ability to control that sort of thing does and we say, he is waving a flag; there must be a problem. By and large you can do that for a long time in most cases, and until the problem is pushed on people real hard.... The pesticide and herbicide container situation, for example, is now becoming a real issue with the various provincial governments, and so they are collecting them themselves. At least they're doing something to collect these things. But I know of a situation, for example, in Italy, where the government there has in fact given an ultimatum to the plastics industry that you will recycle your plastic in the next five years or we are going to shut you right off from production altogether. The fact that there is not very much plastic going into the waste stream in proportion to, say, paper or other waste is immaterial, because it does not self-destruct, and so it builds up and builds up and it is pressing. So the plastic industry is finally cognizant of that elsewhere as well as here. The oil industry is working with us in cleaning up these bottles because they can use the waste oil from the bottles, and we can use the waste plastic. It is likely to work, because we think it has got some economic benefits. And I suppose morally you are right; I have no argument with that.

DR. WOODARD: Your company is not going to survive if you are not making a profit, right?

MR. SURRENDI: Right. We think we can make a profit, and there's no question that part of the edge of that profit will be realized by the collection system itself, because that is where the heavy activities have to take place. The real problems lie not in doing something with the material; it is in gathering enough together at a reasonable enough rate where it becomes economically feasible to do something with it.

MR. PASCHEN: When I was in England, I was surprised they still have a rag and bone man moving around the neighborhood; they could show some unemployed people how to set up a business.

MR. SURRENDI: Well, let me tell you, there is a lot of that sort of thing. The secrets of that elude me. I was just lucky to be in the right place at the right time, and I happen to be the bridge between where the two gentlemen who really have the moxie really got it going. I think that there are all kinds of opportunities out there and there are going to be more successes in this whole thing. I can assure you that I learned a lot in the last year about why certain companies succeed and certain ones don't. There is a lot more to it than meets my eye, I can assure you. I am generally shocked and surprised at how things happen, how fast they happen, the intricacies of the dealings that go on that determine whether or not something does work or it won't work. That is a course that I am still taking for the next ten years, I am sure. I notice nobody has asked about the coal situation yet. We are not recycling coal; we are just cycling it, but we hope to be able to make a large dent in the acid rain situation.

MR. LANDALS: One of the things that has always kind of interested me in this discussion of using coal to generate power in Ontario; has anybody ever looked at the economics of generating it here, then shipping the power there, as opposed to mining the coal here and shipping it there to make the power, and what the differences are in that?

MR. SURRENDI: Maybe, but it wasn't me, I can assure you. I suspect that there are those who have looked heavily at that. One of the things we're running up against, I think, are all of the power facilities, the hydro facilities in both Ontario and Manitoba. We have got this enormous amount of waste power flowing over dams and stuff right now, and that definitely could out-compete us in that, I'm sure.

MR. FLOOK: Carl, as you probably gather from some of my remarks earlier today, I am given to a little bit of philosophizing. Once again I will take the opportunity. It has occurred to me in the construction of our industrial system we have gone in one direction. We have taken raw materials, elemental substances, and assembled them into products we have used, but we have neglected the reverse. We have neglected the disassemblement of these materials, and I'm being very serious. It seems to me that at an age when we are presented with problems of unemployment, problems of job creation, that if we could only bring ourselves to realize that if we approach nature by taking some of its elements and assembling them into ways that suit us, and if we would only go the other way and create the mirror image of these industries that would engage themselves in disassembling of these materials to put them back into a form in which nature could assemble them, we would have completed the cycle -- build our recycling systems into the original system, create twice the number of jobs, because they are being mirror images. There would be exactly the same amount of jobs on the downside as on the upside, and solve the problem of nature. So there you are, fellows, you have got it all in a nutshell.

MR. SURRENDI: That's an interesting philosophy, Bill. I like your approach to it. I think there are, I suppose, ragged attempts being made even now to do these kinds of things, but again they are not entirely well planned out or scientifically approached. We have this fellow that takes the old waste car bodies and crushes them up -- there's a fellow who makes a nice living across the street from us -- and delivers those to the steel plants, and in doing so he separates a lot of the copper out, the various battery casings and that sort of thing, and does something with those. We, on the other hand, take this waste plastic coming in; we separate all of the various components of the plastic out; we separate the aluminum, the paper, the various syrups. It's possible that we may be able to utilize those as well for something else, but it wasn't planned into the operation.

MR. FLOOK: I could talk about this until the sun comes up. But actually you're right; it is being done, but it is being done haphazardly. What I am thinking of is a predetermined, predesigned structure that would create the structure that would allow the demise of our products in exactly the same way as we allow the construction of them.

MR. SURRENDI: I see an enormous organizational problem ahead of us, Bill, but I see that somewhere down the line --

MR. FLOOK: Maybe we should get together over lunch at the Edmonton Inn.

MR. PASCHEN: I would just like to expand on that. I do a lot of rewiring -- that is my business -- and, by golly, to rewire a house takes a lot of time because you have got to do the job twice. First I've got to rip out the old wiring and then put the new one in, and those wires are no longer approved and they are flammable. So there's a big job. I feel that if we can get the pride of rebuilding something, then I wouldn't have a fridge, I wouldn't have a bicycle, I wouldn't have a car because I cannot afford to pay twice for it. There has to be a mechanism worked out. I would like to point out to you what I have been doing: I have been doing not only electrical work, but I have had some experience in blacksmithing in Europe. You just mentioned cars and you take out the battery and the copper wire; that is the way to go. But the unit shouldn't be crushed. There is steel in it, high carbon steel, and you take out the axles, and the springs and the coils, and you can make tools out of those if you have the ability, like blacksmithing. You go to coal and you can create heat and with an anvil and a hammer you can make tools. We don't have to go to Chicago to buy our tools; perhaps they can be made here from recycled steel. I am referring to the axles and the coils and springs, because it is a very valuable commodity and it shouldn't be melted down. It is a ready product, unique in its own way, very tough, has proven itself, and blacksmiths in Alberta know that quite well; they recognize the features. But for me to go out and collect it, I would go broke. I would have to get people to bring this stuff to me, and that would be economic. If you look at the list of blacksmiths in Alberta, you can count them on the hands of your fingers.

DR. KOSTUCH: I will ask a question about coal: is this new technique that you are talking about developing going to be useful in the United States? Can it be exported to Ohio to be used on the high sulphur coal that is produced in Ohio and Pennsylvania to produce the acid rain in the United States?

MR. SURRENDI: Well, my partners have precisely that in mind -- at least the group that I am working with is from Montana -- and brought the technology up here with the idea that we would help them get to commercializing to the point where all the bugs were cleared out of the pilot operation. But, yes, one of the things we would like to be able to do with it is -- we have crass, ulterior motives as well -- we will have a highly competitive product in eastern Montana with no sulphur, no ash, and no water, and about the same heat of eastern U.S. coal. We think that the American government will have no more excuses about not using low-sulphur coal because, you know, we will be using their own technology, so the excuse is no longer there.

DR. KOSTUCH: No, that is not the question. Can it be used on high-sulphur coal in the Ohio River Valley?

MR. SURRENDI: Can you use the coal in our process?

DR. KOSTUCH: Can you use that coal in your process, because the displacement of jobs has been a big argument against controlling acid rain in the United States.

MR. SURRENDI: Okay, I understand your question, Martha. Let me give it this much: the process was developed on bituminous, sub-bituminous, and lignite coals. The higher grade the coal is -- in other words, we are looking to something that is a super-bituminous, somewhere between there and anthracite. The chances are that the development or the improvement to the coal using our process will not be as high, simply because we depend to a large extent on water in the coal. There is an element of shrinkage there that occurs in the coal at different rates than it does to sulphur and ash components, in particular, pyritic sulphur, and that's how we separate them. Fortunately, organic sulphur is also removed in the process, but in the stuff we have out here it is not really required to remove that much because we don't have much in it. Yes, we think we can remove -- you know, if the coal has got 5 or 10 percent water in it we can separate the sulphur from it, especially if it is pyritic. We still have a bug or two to clear up when it comes to removing all of the organic sulphur, but we can get a good chunk of it out now.

MS. POSEY: I would like to thank you very much, Carl, for coming, and particularly for sitting around so long.

MR. SURRENDI: Thank you, my pleasure.

MS. POSEY: There is another thank you that is due. When Bob wasn't here, I hadn't got really; my head was not fluid in Bob not being here, and as a result nobody said thank you to Sheri for her work as chairman. Believe me, I am developing every second a greater appreciation of how much work this was, and how effectively Sheri has done it. Not once have we been off-key; not once have we been lost. Sheri, thank you very much.

(APPLAUSE)

(MEETING ADJOURNED)